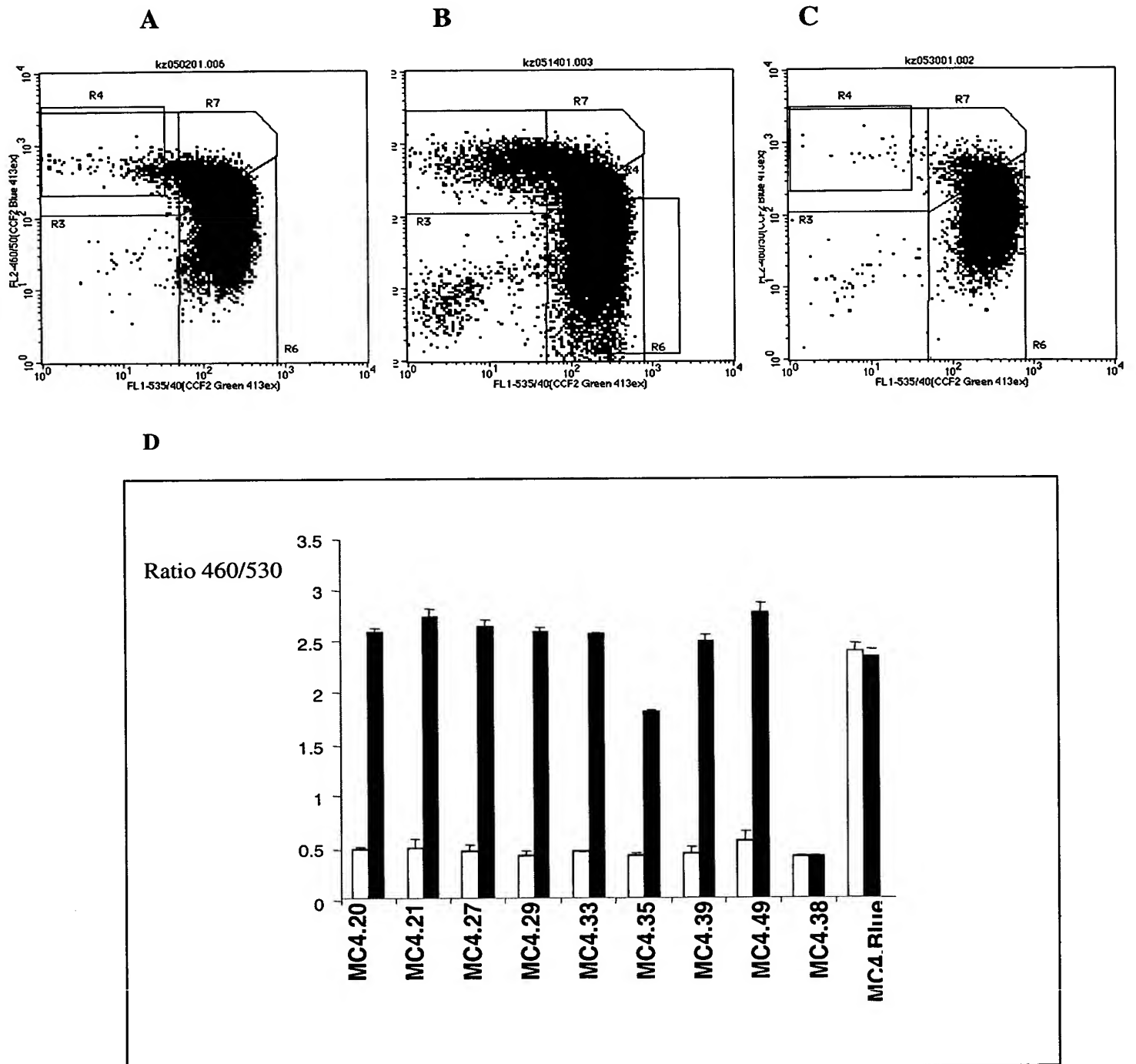
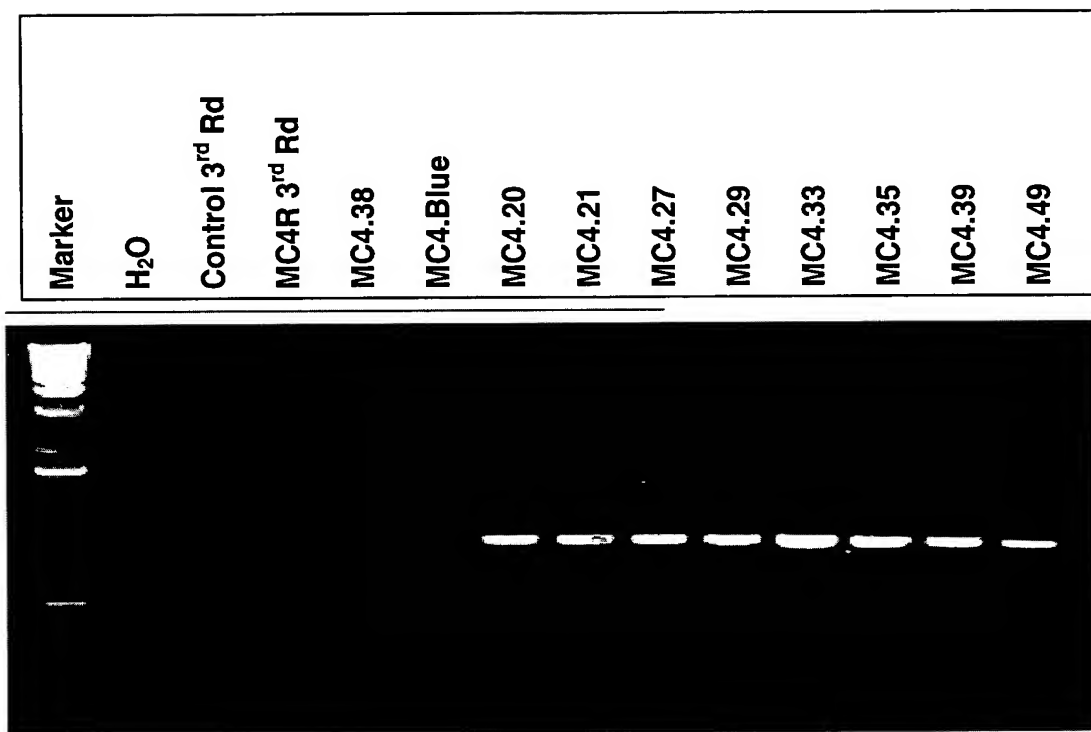


**FIG. 1**

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS  
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**FIG. 2**



**FIG. 3**

Ratio 435/530 nm

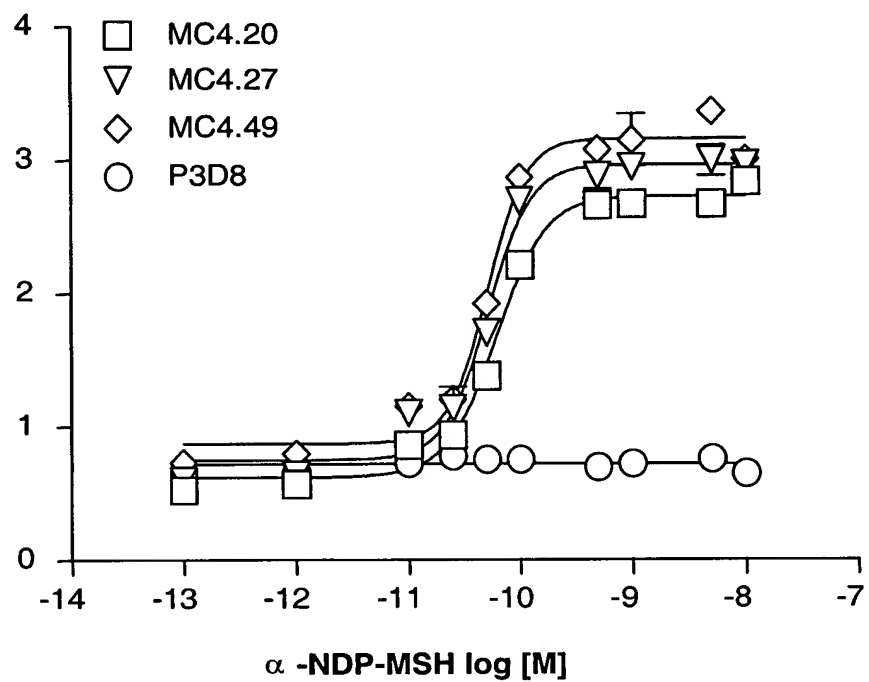
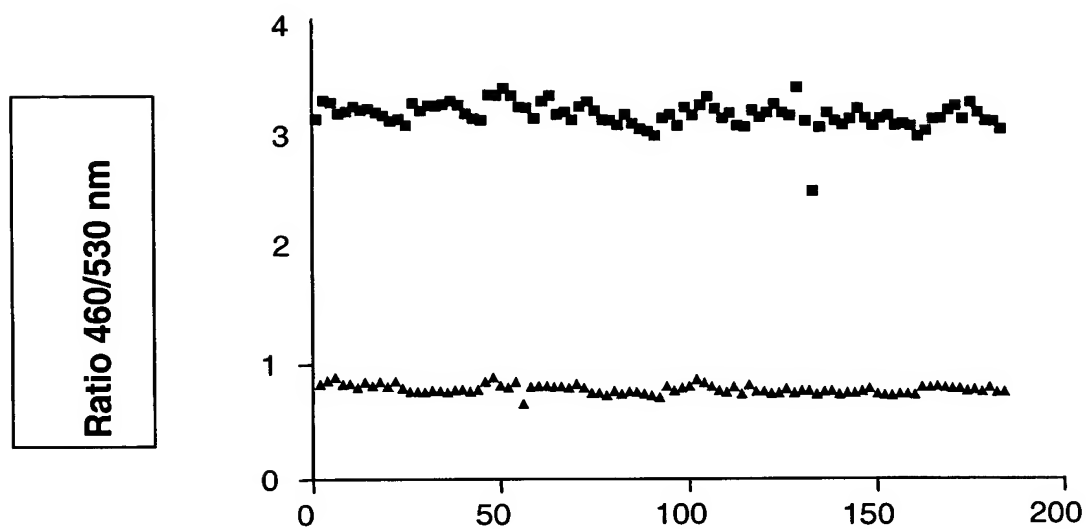
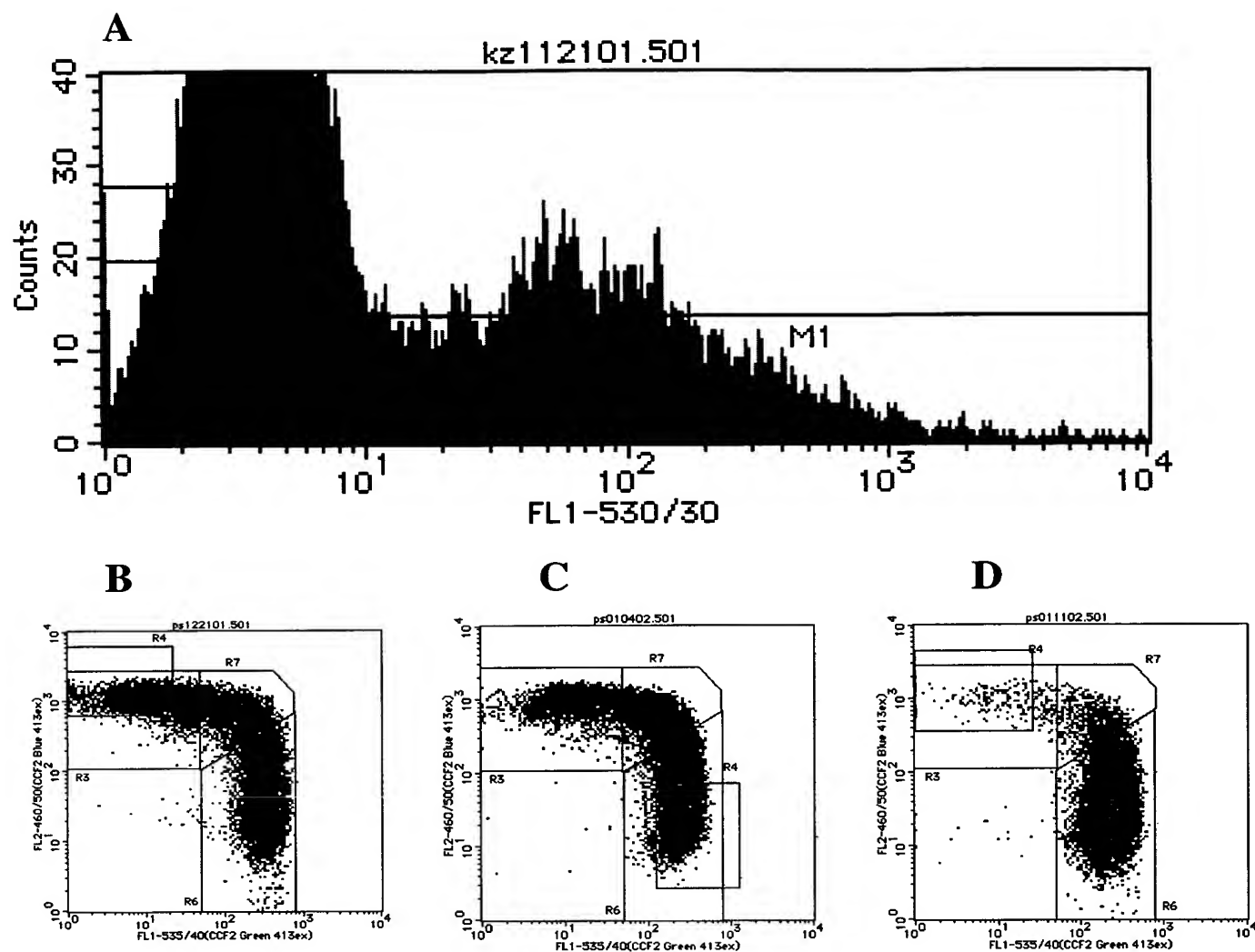


FIG. 4

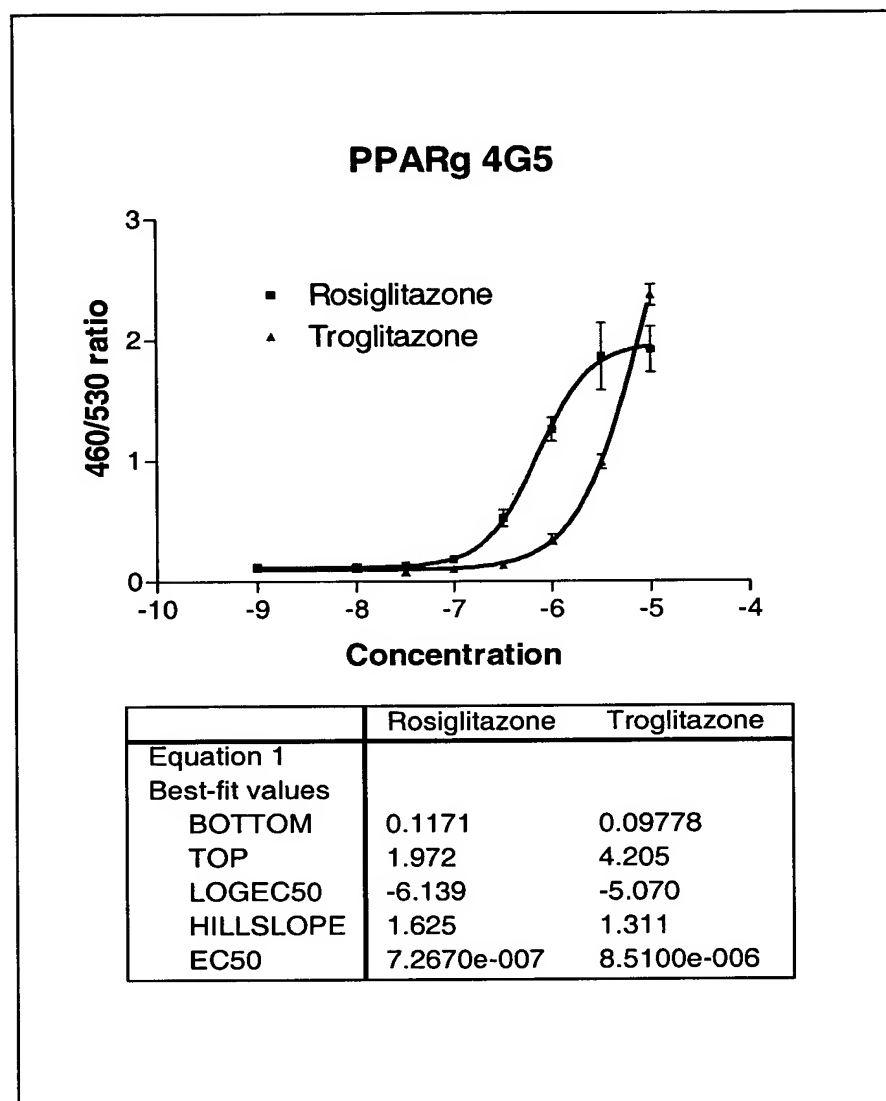


**FIG. 5**

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS  
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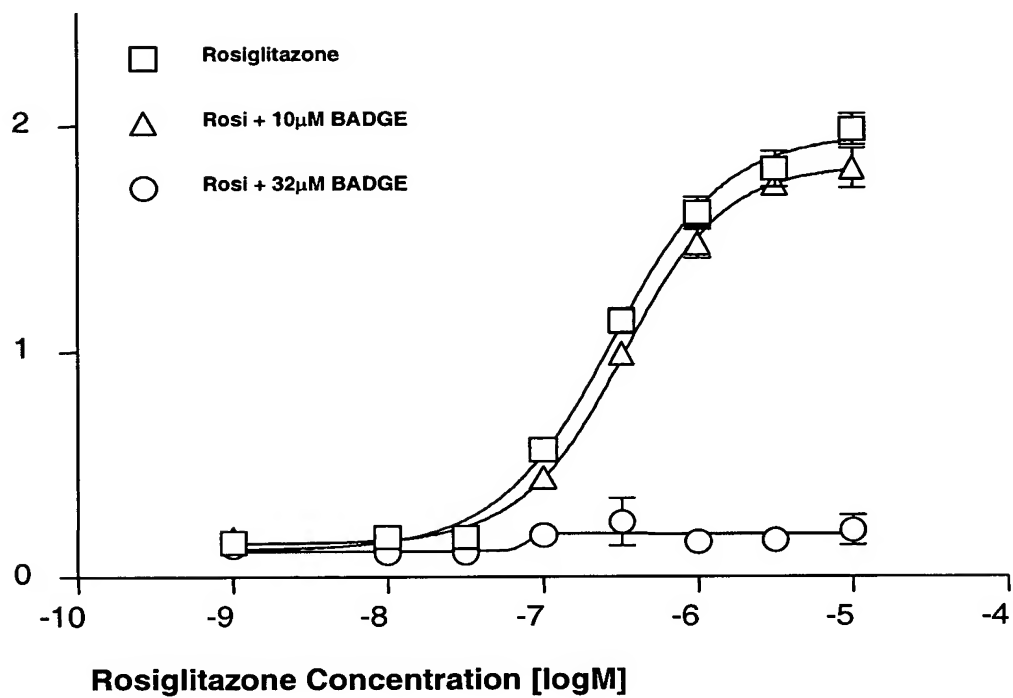


**FIG. 6**

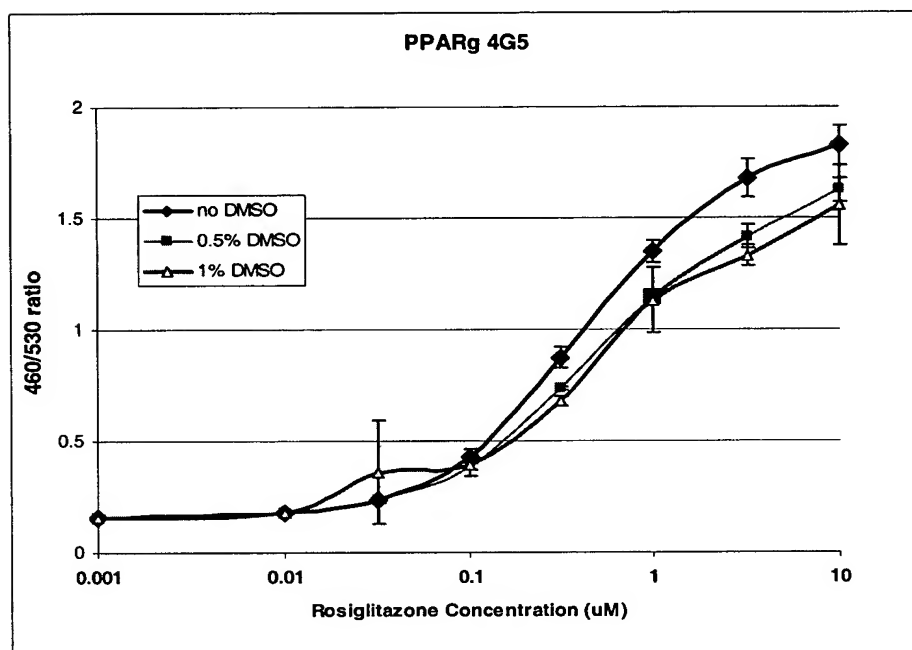


**FIG. 7**

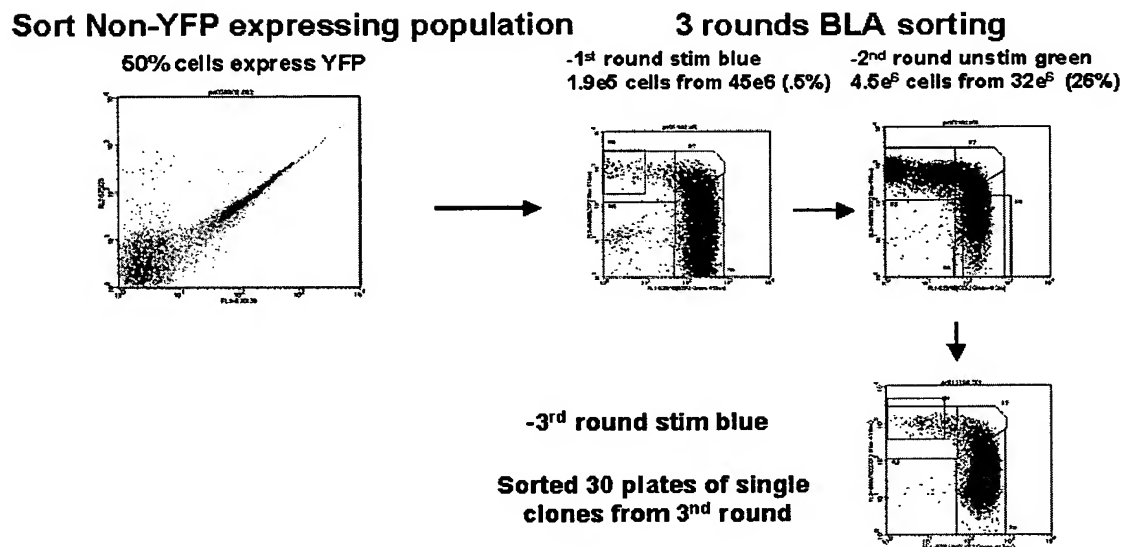
460/530 ratio



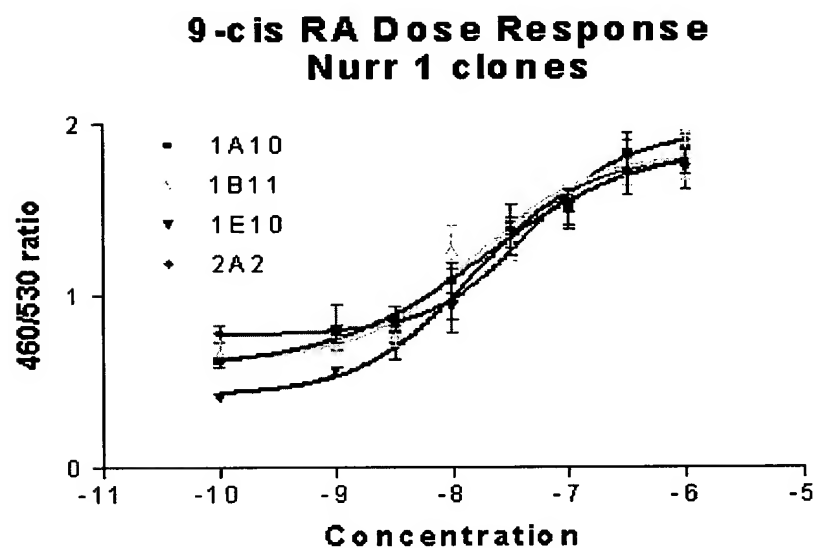
**FIG. 8**



**FIG. 9**



**FIG. 10**



	1A10	1B11	1E10	2A2
Best-fit values				
BOTTOM	0.5840	0.6189	0.4197	0.7722
TOP	1.874	1.828	1.819	1.948
LOGEC50	-7.725	-7.805	-7.821	-7.348
HILLSLOPE	0.8524	0.8589	0.8954	1.025
EC50	1.8830e-008	1.5650e-008	1.5110e-008	4.4760e-008

**FIG. 11**

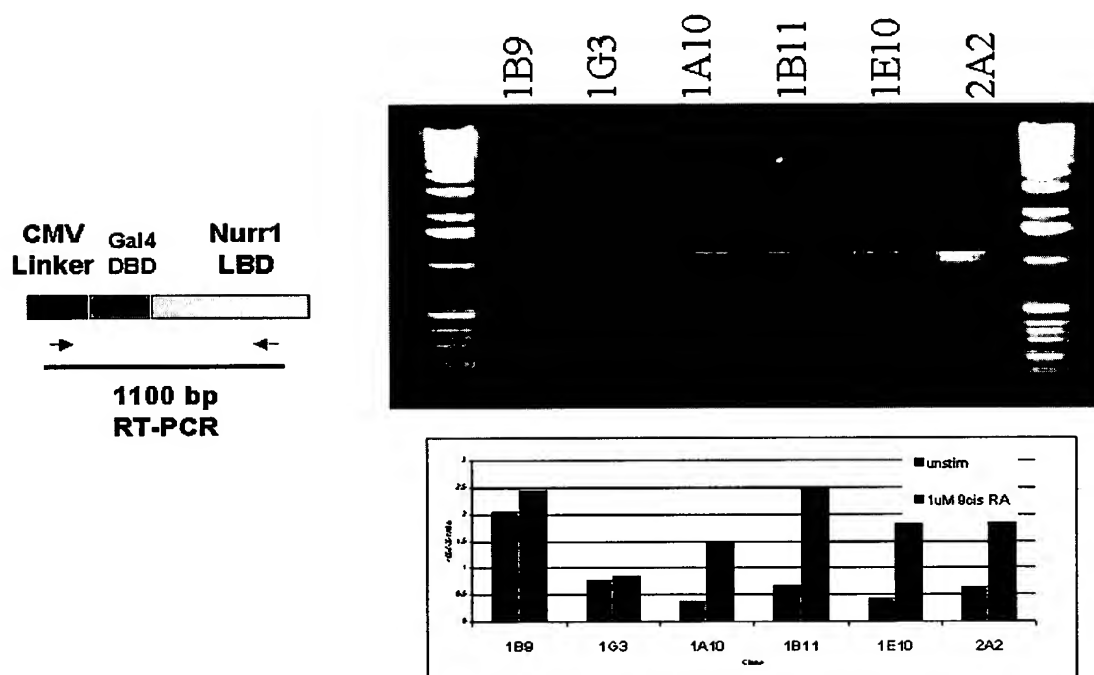
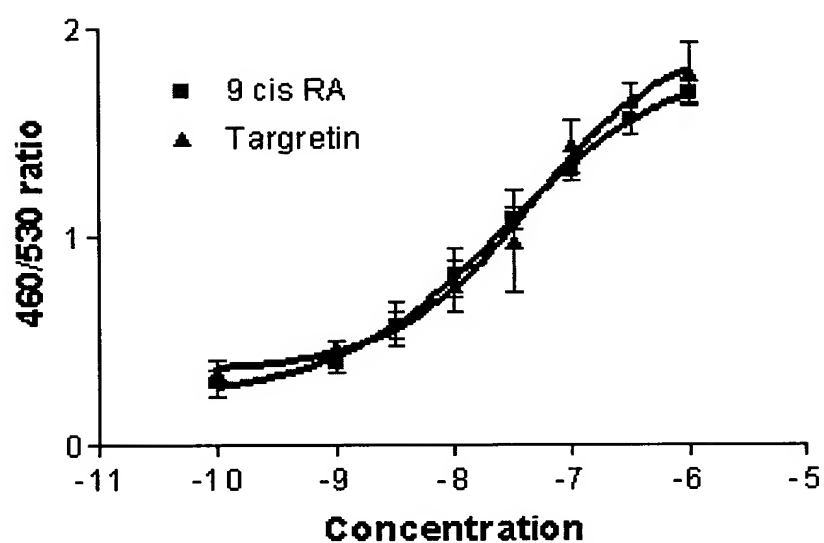


FIG. 12

## Nurr 1 Clone 1E10



	9 cis RA	Targretin
Equation 1		
Best-fit values		
BOTTOM	0.2317	0.3604
TOP	1.857	1.957
LOGEC50	-7.562	-7.337
HILLSLOPE	0.5994	0.7299
EC50	2.7420e-008	4.6010e-008

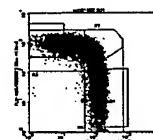
**FIG. 13**

**Sort Non-YFP  
expressing**

**3 rounds BLA**

**-1<sup>st</sup> round stim**

**-2<sup>nd</sup> round unstim**

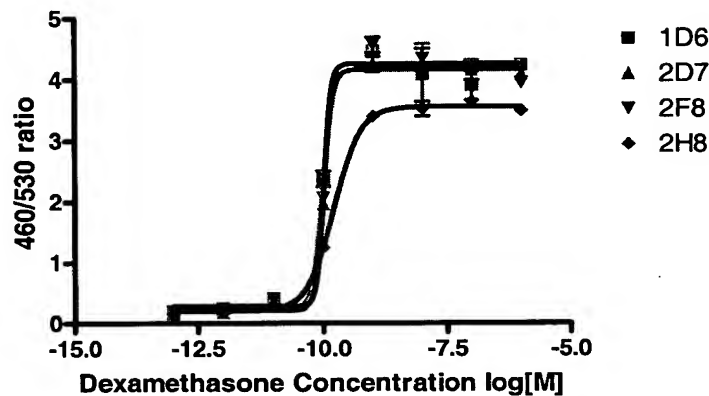


**-3<sup>rd</sup> round stim**

**Sorted 30 plates of  
single**

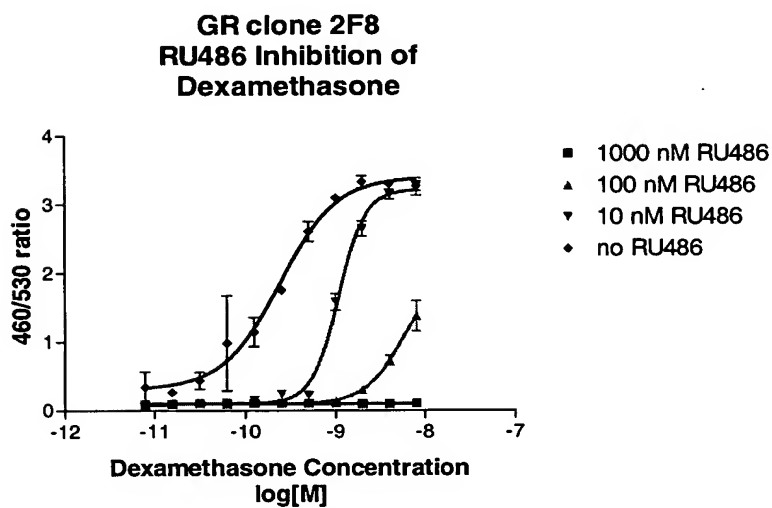
**FIG. 14**

**Dexamethasone dose response profiling  
of GR clones**



	1D6	2D7	2F8	2H8
Sigmoidal dose-response (variable slope)				
Best-fit values				
BOTTOM	0.2699	0.2133	0.2867	0.2025
TOP	4.167	4.160	4.250	3.556
LOGEC50	-10.02	-9.981	-9.986	-9.789
HILLSLOPE	4.712	5.026	6.110	1.609
EC50	9.6534e-011	1.0448e-010	1.0334e-010	1.6242e-010

**FIG. 15**



	1000 nM RU486	100 nM RU486	10 nM RU486	no RU486
Sigmoidal dose-response (variable slope)				
Best-fit values				
BOTTOM	0.06993	0.09536	0.1019	0.3058
TOP	0.09667	2.047	3.216	3.397
LOGEC50	-10.85	-8.239	-8.963	-9.619
HILLSLOPE	10.22	2.007	2.885	1.377
EC50	1.3999e-011	5.7683e-009	1.0888e-009	2.4043e-010

**FIG. 16**

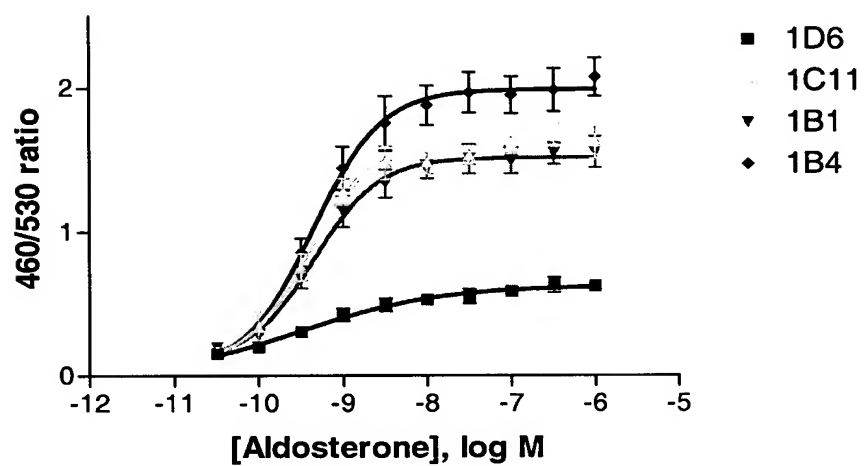
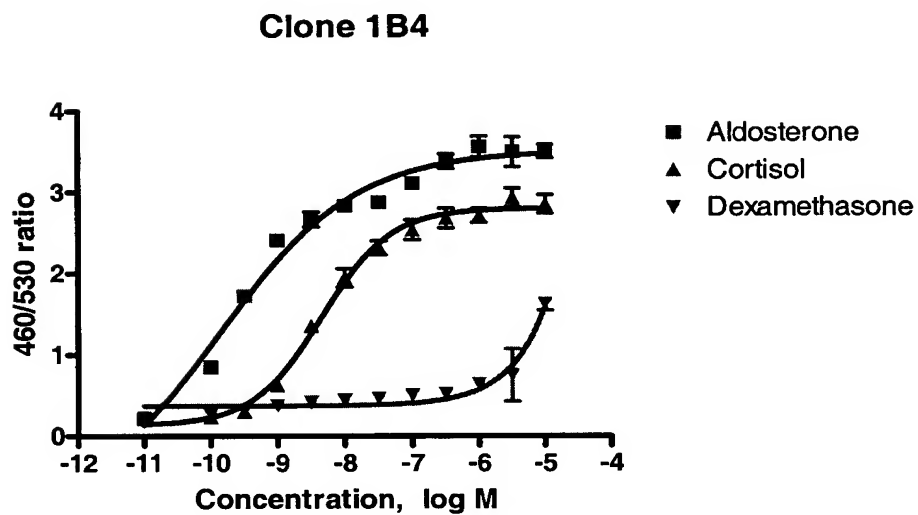
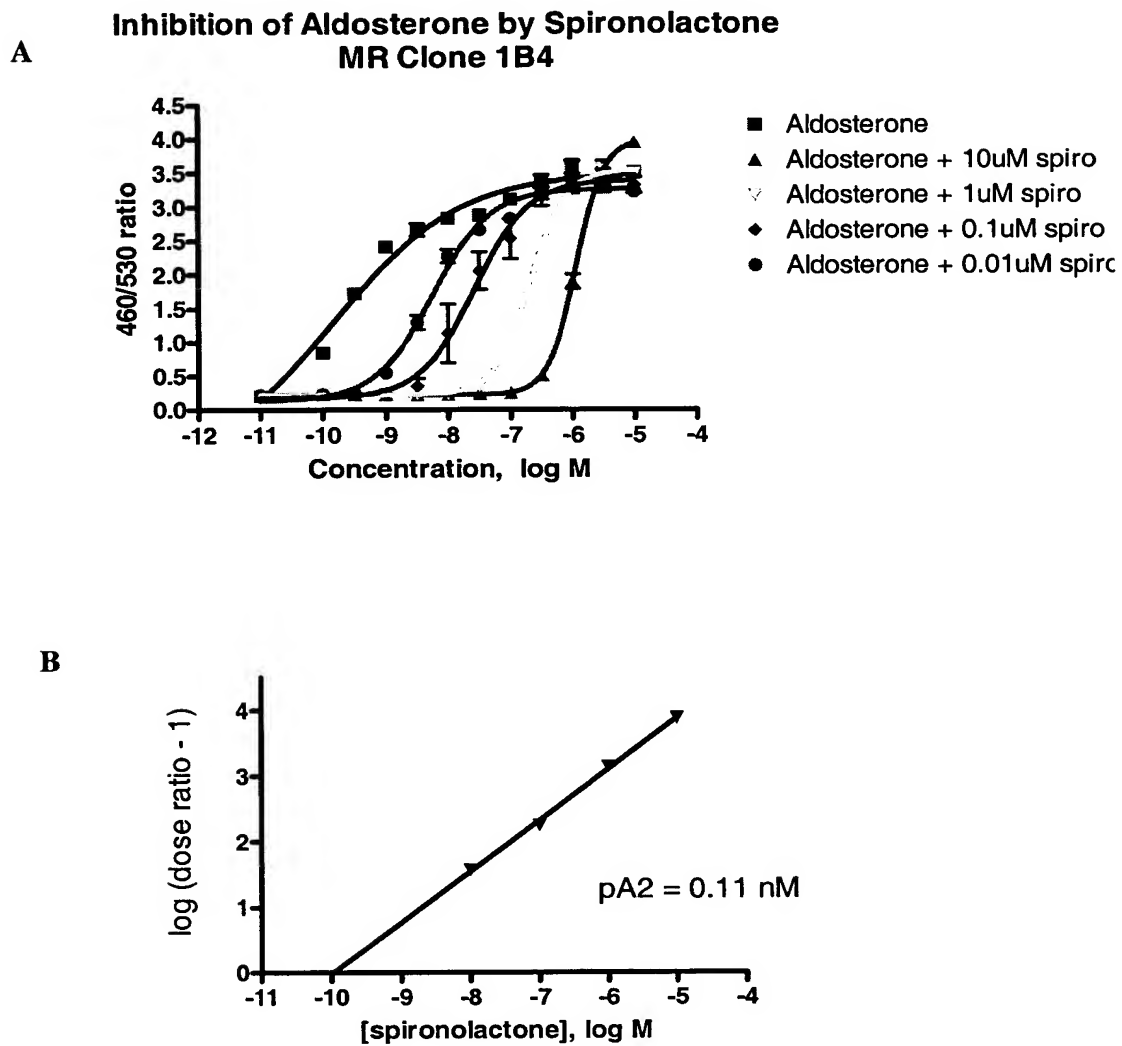


FIG. 17



**FIG. 18**

**FIG. 19**

**Nurrl targeting sequence (SEQ ID NO:71)**

CGTACAAGACAGTTAGCTAGTTGGCAAAACCAAGGAGAATTCTGTGACAA  
GGGAAACTCAGGACAAATCCTGCTAGGCAGTTCTGGAGGGGAAGCGCCCT  
GCGCCTGCAGTACTGACCTGTGACCATAGCCAGGGCAGCAATGCAGGAGA  
AGGCAGAAATGTCGATGTTTCATATTCTGCAAGTTGGAGGAGAATTCAACA  
ATGGAATCAATCCATTCCCCAAAGCCACGAACGCATTGCAACCTGTGCAA  
GACCACCCCATTTGCAAAAGATGAGTTTACCCTCCACTGGGTTGGACCTGC  
AATTAATACCAAAGAGAGAGAGGGGAGAAAAAGAGAGAGAGAGAAAAAGCT  
AAACAATAATTACTTGAAGAGCAATAAATGAGGGATTAAAGAGTCACCT  
AATTACTGAAGAGTTAATTAATAATGTAGATCCAGTGGACCTTGAAAGGGT  
TTAATTTTCATAACAATCAAGAACGCCCCCTATCCCACCTCCATTCCATTCA  
TCCAAGGCTTCTGGGCTCGCTTCTTCTCGTCTTTTTTTGTTTTCTTTCTTTT  
CTTCCTTTCTCCGACTTCCATTTCCCTATTCTGTCTTTTTCTCTACCCACCCCT  
CTGGTTTCCCTTCCCTCCCTTTCTTTTCCCTTCTTGATTTCTCTCACAGCCTCC  
CTGGATTGTCTCCTCCCTCCCTTATTACCTGTATGCTAATCGAAGGACAAA  
CAGTTCTAAGAAAGCTGATTCAAAAAGCAGGTCTTGGTCGGCTTTGGGCA  
GGTCTGCGAAGCCAGGGATCTTCTCTGCCCAGCCCCGGATGATCTCCATG  
GAGCCAGTCAGGAGATCATAGAATTGCTGGATATGCTGGGTGTCATCTCC  
ACTCATTTGATAGTCAGGGTTCGCCTGGAACCTGGAATTTTCATTTAAAAAG  
CACTTAATGAGGTTCTCTAAAATATATAACCCGTGAAATTGCTAACCCCGT  
TTCTAATAGGGGAGCCAGGTTTTTATAACAATTAACCTCTCTCTGACCAG  
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CAGTGCCATCCAGCCCTGGGAAACGTTCACTCTTATCTCCACAAAACAATT  
GACATGTTAGTATTCATGCTAGTCCCAGAGTGGGCCTCGAGCTGAGACGC  
CCTTTTGCAAATCTTAATAAAATTGCAGTCCCTACCAGGTTTGCTCAACAT  
ACTTCCTCCAATTAAGCCCGCATATTTTTTCACAGCTGGAGTAAAAGGATC  
TGACCACTTGATCCCCCACCCTACTGGCATCTTTACACCCTCTCCTTCCCTT  
CCCTGACCCCCAGACAGCCCCCACATCCTTCCCCAGCACAGTGCCAGGAA  
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TTGGGAAGGGGGAGAGTTTGCACAGCCCCTGGATTTCATGGTAGAGGCAC  
TGGTGTATATGGAAGAGGAGGGGGCGATGGGGTAGTGGGGTAGTGGGAAT  
TCACACAGCTTCAAACCCTGTGGCGTGTCCCTCTCCTCCTTCCATCCTG  
TCCTCATGTCTATGCCCCAGCTACATGGATTGTGTCTGAAGATCTGAATCT  
TGAGGCCCTGGCCAGAGCTGCGAGGCATATACAGCCTTGCTTGCCCTTCTT  
TACCCCCGTTGAATCTGAGAGTTAATGACGGATGTGGGGAGGGGTCCTGC  
CCATCTGTTCGTTTGTCCACATGATATCCCCCCCCGCCAGCTTCTTACCCTG  
GAATAGTCCAGGCTGGTCATAGCCGGGTTGGAGTCGACATGGGCCCTGAC  
GAGGGCACTGATCAGACTACCCGGGGGCGAAGGGGGAGAGGGCTCCTGT  
GGGCTCTTCGGTTTTCGAGGGCAAACGACCTCTCCGGCCTTTTAAACTGTCT  
GTGCGAACCCTGCAAAGGAAGAGCCCTGTTAGCGCCGCTTTTCCGAGCC  
CAGGCCAGCTGCTGCCTCGGTCCCTCCCCGGGGAAGGCCGCAGCCGCGG  
GGCACCAGGCTGAGCGGCTGAGGGCCCCAGTGCTTGTAAGCCTTCACTG  
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TCGTATAGTTAAAGGAGAGAAGGGCCTGGCGGCTTTCTCTAGGGAAGGCC  
GGGCAAGCAGGCAGCTGCAGGGTCCTGGAGGCCATACTGAGGGGGAGTC  
GGAGATCCCCAGCACCGGGAAGTGGAACGTGATGCTGGAGTATGAGCAG  
TGGTTTCCCTAAAGGCGCAAACCTGGAGGGTCGGCAGCTCCCCTCAGCCTAC  
CTTCTTTG

**pCDGal4-DBD-Nurr1 (SEQ ID NO:72)**

TCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATAC  
GACTCACTATAGGGAGACCCAAGCTGGCTAGCGTTTAAACTTAAGCTTGC  
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TAAAAAGCTCAAGTGCTCCAAAGAAAAACCGAAGTGCGCCAAGTGTCTGA  
AGAACAACCTGGGAGTGTCTGCTACTCTCCCAAAACCAAAAGGTCTCCGCTG  
ACTAGGGCACATCTGACAGAAGTGAATCAAGGCTAGAAAGACTGGAAC  
AGCTATTTCTACTGATTTTTCCTCGAGAAGACCTTGACATGATTTTGAAAA  
TGGATTCTTTACAGGATATAAAAGCATTGTTAACAGGATTATTTGTACAAG  
ATAATGTGAATAAAGATGCCGTCACAGATAGATTGGCTTCAGTGGAGACT  
GATATGCCTCTAACATTGAGACAGCATAGAATAAGTGCGACATCATCATC  
GGAAGAGAGTAGTAACAAAGGTCAAAGACAGTTGACTGTATCGCCGGGT  
ACCAAAGAAGGTAGGCTGAGGGGAGCTGCCGACCCTCCAGTTTGCGCCTT  
TAGGAAACCACTGCTCATACTCCAGCATCACGTTCCACTTCCCGGTGCTGG  
GGATCTCCGACTCCCCCTCAGTATGGCCTCCAGGACCCTGCAGCTGCCTGC  
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TACGACCCATTTGGAGGAAGACATAAAATAACCCCGCATTTTTTTAATGCTT  
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GTGCCCCGCGGCTGCGGCCTTCCCCGGGGAGGGACCGAGGCAGCAGCTGG  
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CCTCGTCAGGGCCCATGTCTGACTCCAACCCGGCTATGACCAGCCTGGACT  
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CATGAGGACAGGATGGAGGAAGGAGGAGAGGGACACGCCACAGGGTTTG  
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CTTCCCAATCTACTTTATTCCCACTCCTCCATAGAGATAGATGCTTTAATC  
CTCATCCTTCTGCTGCTGGGGAAGGATGTGGGGGCTGTCTGGGG  
GTCAGGGAAGGGAAGGAGAGGGTGTAAAGATGCCAGTGGGGTGGGGGAT  
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CAGCGACCTCGTAGCACCATCCCTAATTGAATTAATTGCCCCGGAACATCT  
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CCTATTAGAAACGGGGTTAGCAATTTACGGGTTATATATTTTAGAGAACC  
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AGGAAGGGAAACCAGAGGGTGGGGTAGAGAAAAAGACAGAATAGGAAA

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VP/02-143 US2

Fig 21b (con't)

TGGAAGTCGGAGAAAGGAAGAAAAAGAAAGAAAAACAAAAAAGACGAG  
AAGAAGCGAGCCCAGAAGCCTTGGATGAATGGAATGGAGGTGGGATAGG  
GGGCGTTCTTGATTGTTATGAAATTAAACCCCTTTCAAGGTCCACTGGATCT  
ACATTTTAATTAACCTCTTCAGTAATTAGGTGACTCTTAAATCCCTCATTTAT  
TGCTCTTCAAGTAATTAGTTGTTTAGCTTTTCTCTCTCTCTTTTTCTCCCCTC  
TCTCTCTTTGGTATTAATTGCAGGTCCAACCCAGTGGAGGGTAAACTCATC  
TTTTGCAATGGGGTGGTCTTGCACAGGTTGCAATGCGTTCGTGGCTTTGGG  
GAATGGATTGATTCCATTGTTGAATTCTCCTCCAACCTTGCAGAATATGAAC  
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CAGTACTGCAGGCGCAGGGCGCTTCCCCTCCAGAACTGCCTAGCAGGATT  
TGTCCTGAGTTTCCCTTGTACACAGAATTCTCCTTGGTTTTGCCAACTAGCTA  
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CAGATATCCATCACACTGGCGGCCGCTCGAGTCTAGAGGGCCCGTTTAAA  
CCCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTT  
GCCCCCTCCCCCGTGCTTCCCTTGACCCTGGAAGGTGCCACTCCCCTGTCC  
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CTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGA  
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CGGAAAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGC  
GGCGCATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTAC  
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GCCACGTTCCGCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGCTCCCTTTA  
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CCGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAAC  
GCGAATTAATTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCA  
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CTGCGCCGATGGTTTCTACAAAGATCGTTATGTTTATCGGCACTTTGCATC  
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## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig 21c (con't)

ATCCGGAGCTTGCAGGATCGCCGCGGCTCCGGGCGTATATGCTCCGCATT  
GGTCTTGACCAACTCTATCAGAGCTTGGTTGACGGCAATTTTCGATGATGCA  
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CCGAGGGCAAAGGAATAGCACGTGCTACGAGATTTTCGATTCCACCGCCGC  
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GATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCACCCCAACTT  
GTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTT  
CACAAATAAAGCATTTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAACT  
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ATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATA  
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GCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCT  
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AACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAA

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig 21d (con't)

ACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAAT  
GTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTATCAGGG  
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TGATGCCGCATAGTTAAGCCAGTATCTGCTCCCTGCTTGTGTGTTGGAGGT  
CGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGA  
CCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTC  
GCGATGTACGGGCCAGATATACGCGTTGACATTGATTATTGACTAGTTATT  
AATAGTAATCAATTACGGGGTTCATTAGTTCATAGCCCATATATGGAGTTCC  
GCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGAC  
CCCCGCCCATTTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATA  
GGGACTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCA  
CTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGT  
CAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCTTAT  
GGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCA  
TGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTTGAC  
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TGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTCCGCCCC  
ATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCA  
GAGC

**pKI-Gal4-DBD-Nurr1 (SEQ ID NO:73)**

TGCACGCTTCAAAAGCGCACGTCTGCCGCGCTGTTCTCCTCTTCCTCATCT  
CCGGGCCTTCGACCTGCATGAAAAAGCCTGAACTCACCGCGACGTCTGTC  
GAGAAGTTTCTGATCGAAAAGTTCGACAGCGTCTCCGACCTGATGCAGCT  
CTCGGAGGGCGAAGAATCTCGTGCTTTCAGCTTCGATGTAGGAGGGCGTG  
GATATGTCCTGCGGGTAAATAGCTGCGCCGATGGTTTCTACAAAGATCGTT  
ATGTTTATCGGCACTTTGCATCGGCCGCGCTCCCGATTCCGGAAGTGCTTG  
ACATTGGGGAATTCAGCGAGAGCCTGACCTATTGCATCTCCCGCCGTGCA  
CAGGGTGTACGTTGCAAGACCTGCCTGAAACCGAACTGCCCGCTGTTCT  
GCAGCCGGTCGCGGAGGCCATGGATGCGATCGCTGCGGCCGATCTTAGCC  
AGACGAGCGGGTTCGGCCCATTCGGACCGCAAGGAATCGGTCAATACT  
ACATGGCGTGATTTTCATATGCGCGATTGCTGATCCCCATGTGTATCACTGG  
CAAACGTGTATGGACGACACCGTCAGTGCGTCCGTCGCGCAGGCTCTCGA  
TGAGCTGATGCTTTGGGCCGAGGACTGCCCCGAAGTCCGGCACCTCGTGC  
ACGCGGATTTTCGGCTCCAACAATGTCCTGACGGACAATGGCCGCATAACA  
GCGGTCAATTGACTGGAGCGAGGCGATGTTTCGGGGATTCCCAATACGAGGT  
CGCCAACATCTTCTTCTGGAGGCCGTGGTTGGCTTGTATGGAGCAGCAGA  
CGCGCTACTTCGAGCGGAGGCATCCGGAGCTTGCAGGATCGCCGCGGCTC  
CGGGCGTATATGCTCCGCATTGGTCTTGACCAACTCTATCAGAGCTTGGTT  
GACGGCAATTTTCGATGATGCAGCTTGGGCGCAGGGTCGATGCGACGCAAT  
CGTCCGATCCGGAGCCGGGACTGTGCGGGCGTACACAAATCGCCCGCAGAA  
GCGCGGCCGTCTGGACCGATGGCTGTGTAGAAGTACTCGCCGATAGTGGA  
AACCGACGCCCCAGCACTCGTCCGAGGGCAAAGGAATGCCTGAGAAAGG  
AAGTGAGCTGTAAAGGCTGAGCTCTCTCTCTGACGTATGTAGCCTCTGGTT  
AGCTTCGTCACCTACTGTTCTTGACTCAGCATGGCAATCTGATGAAATCCC  
AGCTGTAAGTCTGCATAAATTGATGATCTATTAAACAATAAAGATGTCCA  
CTAAAATGGAAGTTTTTTTACTGTCATACTTTGTTAAGAAGGGTGAGAACA  
GAGTACCTACATTTTGAATGGAAGGATTGGAGCTACGGGGGTGGGGGTGG  
GGGTGGGATTAGATAAATGCCTGCTCTTTACTGAAGGCTCTTTACTATTGC  
TTTATGATAATGTTTCATAGTTGGATATCATAATTTAAACAAGCAAAACCA  
AATTAAGGGCCAGCTCATTCTCCACTCATGATCTATAGATCTATAGATCT  
CTCGTGGGATCATTGTTTNTCTGATCCACTGGAAGCTTATCGATACCGTCG  
ACCTCGAGGGGGGGCCCGGTACCCAGCTTTTGTTCCTTTAGTGAGGGTTA  
ATTGCGCGCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGT  
TATCCGCTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTA  
AGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTC  
ACTGCCCCTTTCCAGTCGGGAAACCTGTCTGTCGAGCTGCATTAATGAAT  
CGGCCAACGCGCGGGGAGAGGCGGTTTTCGTATTGGGCGCTCTTCCGCTT  
CCTCGCTCACTGACTCGCTGCGCTCGGTCTGCTTCGGCTGCGGCGAGCGGTAT  
CAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAAC  
GCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTA  
AAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGC  
ATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACT  
ATAAAGATAACAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGT  
TCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAG  
CGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGT  
CGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGCCCGACC  
GCTGCGCCTTATCCGGTAACATCGTCTTGAGTCCAACCCGGTAAGACACG  
ACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGG

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 22b (con't)

TATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTA  
CACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTT  
CGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTA  
GCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGA  
TCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAC  
GAAAACACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTT  
CACCTAGATCCTTTTAAATTA AAAATGAAGTTTTAAATCAATCTAAAGTAT  
ATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCAC  
CTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGT  
CGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTG  
CAATGATACCGCGAGACCCACGCTCACC GGCTCCAGATTTATCAGCAATA  
AACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATC  
CGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTC  
GCCAGTTAATAGTTTTCGCAACGTTGTTGCCATTGCTACAGGCATCGTG GT  
GTCACGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATC  
AAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCT  
TCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCA  
TGGTTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGAT  
GCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTA  
TGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCG  
CCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGG  
GCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAAC  
CCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTC  
TGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGG  
GCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTCAATATTATTGA  
AGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATT  
TAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCC  
ACCTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTGTT  
AAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATA  
AATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAAC  
AAGAGTCCACTATTAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAA  
CCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCTAATCAAGT  
TTTTTGGGGTTCGAGGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGAG  
CCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAAAG  
GAAGGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTG TAG  
CGGTCACGCTGCGCGTAACCACCACACCCGCCGCGCTTAATGCGCCGCTA  
CAGGGCGCGTCCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCG  
ATCGGTGCGGGCCTCTTCGCTATTACGCCAGCTGGCGAAAGGGGGATGTG  
CTGCAAGGCGATTAAAGTTGGGTAACGCCAGGGTTTTCCAGTCACGACGT  
TGTA AACGACGGCCAGTGAGCGCGCGTAATACGACTCACTATAGGGCGA  
ATTGGAGCTCCACCGCGGTGCGGCCGGGCCATGCAGGCCACGACATGATA  
AGATACATTGATGAGTTTGGAACAAACCACA ACTAGAAATGCAGTGAAAAAA  
ATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATA  
AGCTGCAATAAACAAAGTTCTTGTACAGCTCGTCCATGCCGAGAGTGATCC  
CGGCGGCGGTCACGAACTCCAGCAGGACCATGTGATCGCGCTTCTCGTTG  
GGGTCTTTGCTCAGGGCGGACTGGTAGCTCAGGTAGTGGTTGTCGGGCAG  
CAGCACGGGGCCGTCGCCGATGGGGGTGTTCTGCTGGTAGTGGTCGGCGA  
GCTGCACGCTGCCGTCTCGATGTTGTGGCGGATCTTGAAGTTCACCTTGA  
TGCCGTTCTTCTGCTTGTCGGCCATGATATAGACGTTGTGGCTGTTGTAGT  
TGTA CTCCAGCTTGTGCCCCAGGATGTTGCCGTCCTCCTTGAAGTCGATGC

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 22c (con't)

CCTTCAGCTCGATGCGGTTACACAGGGTGTGCGCCCTCGAACTTCACCTCGG  
CGCGGGTCTTGTAAGTTGCCGTCGTCCTTGAAGAAGATGGTGGCGCTCCTGGA  
CGTAGCCTTCGGGCGATGGCGGACTTGAAGAAGTCGTGCTGCTTCATGTGG  
TCGGGGTAGCGGGCGAAGCACTGCAGGCCGTAGCCGAAGGTGGTCACGA  
GGGTGGGCCAGGGCACGGGCAGCTTGCCGGTGGTGCAGATGAACTTCAGG  
GTCAGCTTGCCGTAGGTGGCATCGCCCTCGCCCTCGCCGGACACGCTGAA  
CTTGTGGCCGTTTACGTCGCGCGTCCAGCTCGACCAGGATGGGACACCACCC  
GGTGAACAGCTCCTCGCCCTTGCTCACCATGGTGGCGTTAGCTTGATTTGA  
CAGTGGCTGGGGGTGCGCCGCGGGGTTTTATAGGAAGCCACAGCGGCCA  
CTCGAGCCATAAAAGGCAACTTTAGGAACGGCGGGGGGTGATTGGATTGCG  
AGTCGTTTTATTCACCGGCCTTGCCGCACAGTGCAGCATTTTTTTACCCCT  
CTCCCTCCTTTTTCGGGGGAAAAAAAAAAAAAAAAAAAAAAAAAAGGAGA  
AGAGAAAAAAAAAGCGAGCGAGAGAGAAAGCGAGATTGAGGAAGAGGATG  
AAGAGTTTGGCGATGGGTGCTGGTTCCGTAGGCCAGATGGACAAGAATA  
GCCCCCGCCCTTGCGGACAGTATCCCATTCAGTGACTCAGATCAGATCAA  
GCGGCCGCCAGTGTGATGGATATCTGCAGAATTCCAGCACACTGGCGGCC  
GTTACTAGTGGATCCGTACAAGACAGTTAGCTAGTTGGCAAACCAAGGA  
GAATTCTGTGACAAGGGAACTCAGGACAAATCCTGCTAGGCAGTTCTGG  
AGGGGAAGCGCCCTGCGCCTGCAGTACTGACCTGTGACCATAGCCAGGGC  
AGCAATGCAGGAGAAGGCAGAAATGTCGATGTTTCATATTCTGCAAGTTGG  
AGGAGAATTCAACAATGGAATCAATCCATTCCCCAAAGCCACGAACGCAT  
TGCAACCTGTGCAAGACCACCCCATTGCAAAAGATGAGTTTACCCTCCAC  
TGGGTGGACCTGCAATTAATACCAAAGAGAGAGAGGGGAGAAAAAGAG  
AGAGAGAAAAGCTAAACAATAATTACTTGAAGAGCAATAAATGAGGGA  
TTTAAGAGTCACCTAATTACTGAAGAGTTAATTAAAATGTAGATCCAGTG  
GACCTTGAAAGGGTTTAATTTTATAACAATCAAGAACGCCCCCTATCCCA  
CCTCCATTCCATTTCATCCAAGGCTTCTGGGCTCGCTTCTTCTCGTCTTTTT  
TGTTTTCTTTCTTTTTCTTCTTTCTCCGACTTCCATTTCCTATTCTGTCTTT  
TCTCTACCCACCCCTCTGGTTTCCCTTCCCTCCCTTTCTTTTCTTTCTTGATT  
TCTCTACAGCCTCCCTGGATTGTCTCCTCCCTCCCTTATTACCTGTATGCT  
AATCGAAGGACAAACAGTTCTAAGAAAGCTGATTCAAAAAGCAGGTCTTG  
GTCGGCTTTGGGCAGGTCTGCGAAGCCAGGGATCTTCTCTGCCAGCCCC  
GGATGATCTCCATGGAGCCAGTCAGGAGATCATAGAATTGCTGGATATGC  
TGGGTGTCATCTCCACTCATTTGATAGTCAGGGTTCGCCTGGAACCTGGAAT  
TTCATTTTAAAAAGCACTTAATGAGGTTCTCTAAAATATATAACCCGTGAA  
ATTGCTAACCCCGTTTCTAATAGGGGAGCCAGGTTTTTATAACAATTAAAC  
CTCTCTCTGACCAGTAAGGAAATTAGATGTTCCGGGGCAATTAATTCAATT  
AGGGATGGTGCTACGAGGTGCTGCTTTAAATATGTAAATTGTCATTTCCA  
TACAGACTAAATACAGTGCCATCCAGCCCTGGGAAACGTTCACTCTTATCT  
CCACAAAACAATTGACATGTTAGTATTCATGCTAGTCCCAGAGTGGGCCT  
CGAGCTGAGACGCCCTTTTGCAAATCTTAATAAAATTGCAGTCCCTACCAG  
GTTTGCTCAACATACTTCCCTCCAATTAAGCCCCGCATATTTTTTCACAGCTG  
GAGTAAAAGGATCTGACCCTTGATCCCCCACCCTACTGGCATCTTTACAC  
CCTCTCCTTCCCTTCCCTGACCCCCAGACAGCCCCCACATCCTTCCCCAGC  
ACAGTGCCAGGAAGGATGAGGATTAAAGCATCTATCTCTATGGAGGACTG  
GGAATAAAGTAGATTGGGAAGGGGGAGAGTTTGCACAGCCCTGGATTTC  
ATGGTAGAGGCACTGGTGTATATGGAAGAGGAGGGGGCGATGGGGTAGTG  
GGGTAGTGGGAATTCACACAGCTTCAAACCCTGTGGCGTGTCCCTCTCCTC  
CTTCTCCATCCTGTCTCATGTCTATGCCCCAGCTACATGGATTGTCTG  
AAGATCTGAATCTTGAGGCCCTGGCCAGAGCTGCGAGGCATATACAGCCT

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 22d (con't)

TGCTTGCCTTTCTTTACCCCCGTTGAATCTGAGAGTTAATGACGGATGTGG  
GGAGGGGTCCTGCCCATCTGTTCGGTTTGTCCACATGATATCCCCCCCCGCCA  
GCTTCTTACCCTGGAATAGTCCAGGCTGGTCATAGCCGGGTTGGAGTCGA  
CATGGGCCCTGACGAGGGCACTGATCAGACTCACCGGGGGCGAAGGGGG  
AGAGGGCTCCTGTGGGCTCTTCGGTTTCGAGGGCAAACGACCTCTCCGGC  
CTTTTAAACTGTCTGTGCGAACCCTGCAAAGGAAGAGCCCTGTTAGCGC  
CGCTTTTCCGAGCCCAGGCCAGCTGCTGCCTCGGTCCCTCCCCGGGGGAAG  
GCCGCAGCCGCGGGGCACCAGGCTGAGCGGCTGAGGGCCCCAGTGCTTGT  
AAAGCCTTCACTGACTAGAAGCATTAAAAAATGCGGGGTTATTTTATGTCT  
TCCTCCAAATGGGTTCGTATAGTTAAAGGAGAGAAGGGCCTGGCGGCTTTC  
TCTAGGGAAGGCCGGGCAAGCAGGCAGCTGCAGGGTCCTGGAGGCCATA  
CTGAGGGGGAGTCGGAGATCCCCAGCACCGGGAAGTGGAACGTGATGCT  
GGAGTATGAGCAGTGGTTTCTTAAAGGCGCAAACCTGGAGGGTCGGCAGCT  
CCCCTCAGCCTACCTTCTTTGGTACCCGGCGATACAGTCAACTGTCTTTGA  
CCTTTGTTACTACTCTCTTCCGATGATGATGTCGCACTTATTCTATGCTGTC  
TCAATGTTAGAGGCATATCAGTCTCCACTGAAGCCAATCTATCTGTGACGG  
CATCTTTATTCACATTATCTTGTACAAATAATCCTGTTAACAATGCTTTTAT  
ATCCTGTAAAGAATCCATTTTCAAATCATGTCAAGGTCTTCTCGAGGAAA  
AATCAGTAGAAATAGCTGTTCCAGTCTTTCTAGCCTTGATTCCACTTCTGT  
CAGATGTGCCCTAGTCAGCGGAGACCTTTTGGTTTTGGGAGAGTAGCGAC  
ACTCCCAGTTGTTCTTCAGACACTTGGCGCACTTCGGTTTTTCTTTGGAGC  
ACTTGAGCTTTTTAAGTCGGCAAATATCGCATGCTTGTTTCGATAGAAGACA  
GTAGCTTCATGGTGGCAAGCTTAAGTTTAAACGCTAGAACTAGTGGATCC  
GGATAAGCCAGTAAGCAGTGGGTTCTCTAGTTAGCCAGAGAGCTCTGCTT  
ATATAGACCTCCCACCGTACACGCCTACCGCCCATTGCGTCAATGGGGC  
GGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTTTGGTGCCAAAACAA  
ACTCCCATTTGACGTCAATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAA  
ACCGCTATCCACGCCCATTTGATGTACTGCCAAAACCGCATCACCATGGTA  
ATAGCGATGACTAATACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAA  
GGTCATGTACTGGGCATAATGCCAGGCGGGGCCATTTACCGTCATTGACGT  
CAATAGGGGGCGTACTTGGCATATGATACACTTGATGTACTGCCAAGTGG  
GCAGTTTACCGTAAATACTCCACCCATTGACGTCAATGGAAAGTCCCTATT  
GGCGTTACTATGGGAACATACGTCAATTATTGACGTCAATGGGCGGGGGTC  
GTTGGGCGGTCAGCCAGGCGGGGCCATTTACCGTAAGTTATGTAACGCGGA  
ACTCCATATATGGGCTATGAACTAATGACCCCGTAATTGATTACTATTAAT  
AACTAGTCAATAATCAATGTCAACCCCGGGCTGCAGGAATTCTACCGGGT  
AGGGGAGGCGCTTTTCCCAAGGCAGTCTGGAGCATGCGCTTTAGCAGCCC  
CGCTGGCACTTGGCGCATCACAAGTGGCCTCTGGCCTCGCACACATTCCAC  
ATCCACCGGTAGCGCCAACCGGCTCCCTTCTTTGGTGGCCCCCTTCGCGCCA  
CCTTCTACTCCTCCCCTAGTCAGGAAGTTCCCCCCCCGCCCCGAGCTCGCG  
TCGTGCAGGACGTGACAAATGGAAGTAGCACGTCTCACTAGTCTCGTGCA  
GATGGACAAGCACCGCTGAGCAATGGAAGCGGGTAGGCCTTTGGGGCAG  
CGGCAATAGCAGCTTGGCTCCTTCGCTTTCTGGGCTCAGAGGCTGGGAA  
GGGGTGGGTCCGGGGGCGGGCTCAGGGGCGGGCTCAGGGGCGGGGCGGG  
CGCGAAGGTCTCCGGACCCGGCATTC

**GR region of homology (SEQ ID NO:74)**

CGTACAAGACAGTTAGCTAGTTGGCAAAACCAAGGAGAATTCTGTGACAA  
GGGAAACTCAGGACAAATCCTGCTAGGCAGTTCTGGAGGGGAAGCGCCCT  
GCGCCTGCAGTACTGACCTGTGACCATAGCCAGGGCAGCAATGCAGGAGA  
AGGCAGAAATGTCGATGTTTCATATTCTGCAAGTTGGAGGAGAATTCAACA  
ATGGAATCAATCCATTCCCCAAAGCCACGAACGCATTGCAACCTGTGCAA  
GACCACCCCATTTGCAAAAGATGAGTTTACCCTCCACTGGGTTGGACCTGC  
AATTAATACCAAAGAGAGAGAGGGGAGAAAAAGAGAGAGAGAAAAAGCT  
AAACAATAATTACTTGAAGAGCAATAAATGAGGGATTAAAGAGTCACCT  
AATTACTGAAGAGTTAATTAATAATGTAGATCCAGTGGACCTTGAAAGGGT  
TTAATTTTCATAACAATCAAGAACGCCCCCTATCCCACCTCCATTCCATTCA  
TCCAAGGCTTCTGGGCTCGCTTCTTCTCGTCTTTTTTTTGTCTTTCTTTT  
CTTCCTTTCTCCGACTTCCATTTCCCTATTCTGTCTTTTTCTCTACCCACCT  
CTGGTTTCCCTTCCCTCCCTTTCTTTTCTTTCTTGATTTCTCTCACAGCCTCC  
CTGGATTGTCTCCTCCCTCCCTTATTACCTGTATGCTAATCGAAGGACAAA  
CAGTTCTAAGAAAGCTGATTCAAAAAGCAGGTCTTGGTTCGGCTTTGGGCA  
GGTCTGCGAAGCCAGGGATCTTCTCTGCCCAGCCCCGGATGATCTCCATG  
GAGCCAGTCAGGAGATCATAGAATTGCTGGATATGCTGGGTGTCATCTCC  
ACTCATTTGATAGTCAGGGTTCGCCTGGAAGTGAATTTTCATTTTAAAAAG  
CACTTAATGAGGTCTCTAATAATATATAACCCGTGAAATTGCTAACCCCGT  
TTCTAATAGGGGAGCCAGGTTTTTATAACAATTAAACCTCTCTCTGACCAG  
TAAGGAAATTAGATGTTCCGGGGCAATTAATTCAATTAGGGATGGTGCTA  
CGAGGTCGCTGCTTTAATAATGTAAATTGTCATTTCCATACAGACTAAATA  
CAGTGCCATCCAGCCCTGGGAAACGTTCACTCTTATCTCCACAAAACAATT  
GACATGTTAGTATTCATGCTAGTCCCAGAGTGGGCCTCGAGCTGAGACGC  
CCTTTTGCAAATCTTAATAAAATTGCAGTCCCTACCAGGTTTGCTCAACAT  
ACTTCCTCCAATTAAAGCCCGCATATTTTTTCACAGCTGGAGTAAAAGGATC  
TGACCACTTGATCCCCCACCCCACTGGCATCTTTACACCCCTCTCCTTCCCTT  
CCCTGACCCCCAGACAGCCCCCACATCCTTCCCCAGCACAGTGCCAGGAA  
GGATGAGGATTAAAGCATCTATCTCTATGGAGGACTGGGAATAAAGTAGA  
TTGGGAAGGGGGAGAGTTTGACACAGCCCCTGGATTTTCATGGTAGAGGCAC  
TGGTGTATATGGAAGAGGAGGGGGCGATGGGGTAGTGGGGTAGTGGGAAT  
TCACACAGCTTCAAACCTGTGGCGTGTCCCTCTCCTCCTTCCATCCTG  
TCCTCATGTCTATGCCCCAGCTACATGGATTTGTCTGAAGATCTGAATCT  
TGAGGCCCTGGCCAGAGCTGCGAGGCATATACAGCCTTGCTTGCCTTTCTT  
TACCCCCGTTGAATCTGAGAGTTAATGACGGATGTGGGGAGGGGGTCCTGC  
CCATCTGTCGGTTTGTCCACATGATATCCCCCCCCGCCAGCTTCTTACCCTG  
GAATAGTCCAGGCTGGTCATAGCCGGGTTGGAGTCGACATGGGCCCTGAC  
GAGGGCACTGATCAGACTCACCGGGGGCGAAGGGGGAGAGGGCTCCTGT  
GGGCTCTTCGGTTTTCGAGGGCAAACGACCTCTCCGGCCTTTTAAACTGTCT  
GTGCGAACCCTGCAAAGGAAGAGCCCTGTTAGCGCCGCTTTTCCGAGCC  
CAGGCCAGCTGCTGCCTCGGTCCCTCCCCGGGGAAGGCCGCAGCCGCGG  
GGCACCAGGCTGAGCGGCTGAGGGCCCCAGTGCTTGTAAGCCCTTCACTG  
ACTAGAAGCATTAATAAAATGCGGGGTTATTTTATGTCTTCCCTCAAATGGG  
TCGTATAGTTAAAGGAGAGAAGGGCCTGGCGGCTTTCTCTAGGGAAGGCC  
GGGCAAGCAGGCAGCTGCAGGGTCCTGGAGGCCATACTGAGGGGGAGTC  
GGAGATCCCCAGCACCGGGAAGTGGAACGTGATGCTGGAGTATGAGCAG  
TGGTTTCCCTAAAGGCGCAAACCTGGAGGGTCGGCAGCTCCCTCAGCCTAC  
CTTCTTTG

**pCDGal4-DBD-GR (SEQ ID NO:75)**

TAACAGGATTATTTGTACAAGATAATGTGAATAAAGATGCCGTCACAGAT  
AGATTGGCTTCAGTGGAGACTGATATGCCTCTAACATTGAGACAGCATAG  
AATAAGTGCGACATCATCATCGGAAGAGAGTAGTAACAAAGGTCAAAGA  
CAGTTGACTGTATCGCCGGGTACCATTGAGCAGGCCACTACAGGAGTCTC  
ACAAGAAACCTCTGAAAATCCTGGTAACAAAACAATAGTTCCTGCAACGT  
TACCACAACCTACCCCTACCCTGGTGTCACTGTTGGAGGTTATTGAACCTG  
AAGTGTTATATGCAGGATATGATAGCTCTGTTCCAGACTCAACTTGGAGG  
ATCATGACTACGCTCAACATGTTAGGAGGGCGGCAAGTGATTGCAGCAGT  
GAAATGGGCAAAGGCAATACCAGGTAAGATGCAAAACATAAAAGAGCAA  
CTATATAAACCTTTGTGTTTTCTTCAGCAAAAACACTTTGGCTTTTATATCA  
TCGTGAGCCCATGGCTTATCTTGTCTCTTAGTTCTGGGGACTATGAAGG  
GGAGAGTCAGGTGAATACAGGTGATAGGGAGTTTATAATAAAACATTTAC  
ATTACTCCCTGCTTTTCAAATCATTATGCACAGGATGGTAATTTACATAG  
GATGATGTAATATCAGAATTCAAGTTACAAGACTCACTCAAACTCCTTTT  
ACACTGAAGTTTGGGGAAAGAAAATGTTTTTAGTTAATTCCATTTGTTTTT  
CTTCATTGTGCCACTTTTAAAAATCAGGTTGTTTGTAAAGATTGGTAAACAT  
CAAGTATGTTGATTGTCAAAATTTGTACTAAAGTAGAATGATTTTAAACCT  
TCACTAAATGAAATGCTACACATTGAATGTAATTTTAAAGATAATTTTAA  
TAAAGTTACCCTATTGGAATTTGGTGTGGAATGGCAGAGGTCAATGTTA  
GTGTCAGCTCTGACTTTAAAGACAGGGAATTGACAAGCCTGTGTTCACGC  
AAATAGTTAGGGAGAGAGCAAGAAAGTAACCTGACCTCCTGTATCCTTG  
TTTTATTAAGGGGGAAAGAGGTGTGAATAGCAGGGCAAATGTTTTGCTTA  
ACTCATTGATTAATACCTCAAGCCAAGATTCTTTTCTGTTTTTTTAAATCA  
ATACATAATAGTTGTACATATTTACTGTACATATTTATATTTAGGGGGTAC  
ATGTAATAATTTAATAAAAAGCATAACAACGTGTAAGGATCAAATCAGAGTA  
ACTGGGATATCCATCACCTCAAACATTTGTTTGGGGAACATTCCAAATCTT  
CTCTTTTAGCTATTTTGAATATAAAGTAAATTATTGTAACTATAGTCAT  
CCTGTTGTGCTACTGAACACTAAACTTATTTCTTCTAACTGTATTTTTGCA  
CCCGTCAACCATTCCCGCTTCATCCCCATCACCCTATCTTCCCGGTCACT  
GGTAACCGCCAAGCCAAGAATTTTGGCTATTTTACTATTTAGTTTCATGTTT  
ACTTAAGCAGACAGAGGTGACAAAACCTGGCTTTTTTTTTTTTTTTTACATT  
AAAAGCTATTAAAAAGCACCTAGGGGGCTGGGTGCGATGGCTCACGCCTG  
TAATCCCAGCACTTTGGGAAGCCCAGGTGGGTGGATCAGTTGAGGTCAGG  
AGTTCGAGACCAGCCTGGCCAGCATAGCAAAACCCCATCTCTACTAAAAT  
TACAAAAATTAGCCGGGCATGGTGGTATGAATCTGTATTCCTAGCTACTTG  
GGAGGCTGGCACTGAGAATCACTTGAACCCGGGAGGCGGAGGTTGCAGT  
GAGCCGAGATGGCACCATTGCACTCCAGCCTGGGTGACAGAGCAAGACTT  
TGTCTCAATTAAAAAATAAAAAAAAAAAAAAAAAACACAAGAGGGTTTGTG  
AGTCTTAAAGTGTGAGATGACAGAAGAAAACCTGTGTCTACCTAGTATTTA  
ATTTCCATTTTCTGTTAGGGGTGCCCTTGTTTTGACAGGGCTAATTGATCTC  
ATTGCTCCTTGGCAATTCCACAGAGATGATCTTCTGAAGAGTGTTGCCTC  
ATACCTTTATTTCTCTTAATTCAGGTTTCAGGAACCTACACCTGGATGACC  
AAATGACCCTACTGCAGTACTCCTGGATGTTTCTTATGGCATTGCTCTGG  
GGTGGAGATCATATAGACAATCAAGTGCAAAACCTGCTGTGTTTTGCTCCTG  
ATCTGATTATTAATGAGTAAGTTGTATGTGTGTCATTTTCCCTGTATTCATA  
GGGTATCTTTAACCAGCTGATGTTTTCTGATTGACTGCTATTGTGATAAT  
TCAGGACTGAAACAATCCTACTAGGTATCTAGGATCTAGGCAAACTGGAA  
ATAGAGTTATGAGTGCTTGGGGCAGGACAAGTGTAATGTAAAGCAAATGT

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 24b (con't)

ACATGTGGCATTATTACTGTCCCAGGACATGTTTGAGGATATTTAACAGCA  
TATCTGAGGTTAGTAAAGTCTGTGCGCAAGCAACAAGGAATCTTACTGTGA  
TATCATTTACATAACCCTATTCCAGAAAGAAAAAGGAGCATGGTAAAACT  
CATGTGGATTTCAGTGGGGACAATTGTAGATGAGGATATCTAGGCTGATGG  
GGTGGGACATATGGACCCAGACACAAGAGGTATCTCTTTGCATGGCAAGG  
CTCACCCAGTGTCTGTGGTTTAAGAATATGGGAACAAATTTGTTTTGTTTA  
ACTGAGAGAAGACCAAGCCTTTAAGATTTTATAAATCAGCTATTCTCTTAT  
CCTCTAAGCTTATTCCTGTGTCTGCGAAATACTTCAGGTGTCCATTTCCCCT  
TACCTCATTGCAGTTGTTTCCTCACTCGTTTTCTCCCTCCAGTGTAACGTTT  
ATCATGTTGGCTAATGTTTGCTTCCTCAAGCACAGTCTGACTGCATCACAT  
ATCTCCCCAGTACACAGATTGTCTTCAGTATCTTCCCCTGACCCTCCAGT  
ACATATTCTGCATGATTTTCAGACTTTCCAGAATCTGACCTCACTTCCTCTCC  
CATTGTTTTCTTCACACACTCTTCATTCCCATCCATCCTTTCCAGCATACT  
CTTAGACTCTTGGTGTTCACATCACCAGATACACAGCAGAGAAGTCACAT  
CCTAGTTACTCTCACTTTCTACCTTGTATTACTACTTTTCGTACCCCTAGCT  
TATTGCTATTAGTACAATGTAAACAGGGAGTTTACACACACATACCCCTG  
GTCTAAGAAGAATAAAAAATGAAGGAGATTTCTGTTTGTATAGAAAACAG  
AAGTCACCTTGACTTTTATTGCCAAAAAGAGGACTGTTCAAACACTACTGCAT  
CACAATGTAACAAGATTAGGTAGTTGGATCCAATTTTAAATTAACCTGGTA  
AATATATTTAGTTTCTGGGGAAACTGAAGACATTATTACTCATCATAATCC  
TACCATGCTGTTTAAAAAATACCATGTTGGCAGTATTTGTTTTTTAGTCAC  
TTTCTAATATGTAATTTGAAGGCATTTAAGTGAATTAAAGCATAAACA  
GATTTGTATGAAACACCAACTTATCCTGGTTTATAAACTAACCTAATTTA  
GGGTTTTTATTATTAGGGCATTTCAGATTTAGCTTTAAGCAGTCACAGCAAA  
ATCTAATCATGCCACATACATTCCCTTACATAAAGTGGGATTTATAATTTTT  
TTTCTCAACAGATTTACATTAGTTTCATTTTCATTAAGGGATATGTACTTC  
CTATTCTTGTTCTCATGCTGCTGCCTGCGGCCGCTCGAGTCTAGAGGGC  
CCGTTTAAACCCGCTGATCAGCCTCGACTGTGCCCTTCTAGTTGCCAGCCAT  
CTGTTGTTTGCCCCCTCCCCCGTGCCCTTCCTTGACCCTGGAAGGTGCCACTC  
CCACTGTCCTTTCCTAATAAAATGAGGAAATTGCATCGCATTGTCTGAGTA  
GGTGTCACTTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGA  
GGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGG  
CTTCTGAGGCGGAAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCG  
CCCTGTAGCGGCGCATTAAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGT  
GACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCC  
TTCCTTTCTCGCCACGTTTCGCCGGCTTTCCCCGTCAGCTCTAAATCGGGG  
GCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAA  
ACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGG  
TTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTT  
CCAAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATA  
AGGGATTTTGCCGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACA  
AAAATTTAACGCGAATTAATTCTGTGGAATGTGTGTCAGTTAGGGTGTGG  
AAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCA  
ATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGA  
AGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCT  
AACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCC  
CCATGGCTGACTAATTTTTTTTATTTATGCAGAGGCCGAGGCCGCTCTGC  
CTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCCTAGGCTT  
TTGCAAAAAGCTCCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCA  
CGTGATGAAAAAGCCTGAACCTACCGCGACGTCTGTCGAGAAGTTTCTGA

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 24c (con't)

TCGAAAAGTTCGACAGCGTCTCCGACCTGATGCAGCTCTCGGAGGGCGAA  
GAATCTCGTGCTTTTCAGCTTCGATGTAGGAGGGCGTGGATATGTCCTGCGG  
GTAAATAGCTGCGCCGATGGTTTCTACAAAGATCGTTATGTTTATCGGCAC  
TTTGCATCGGCCGCGCTCCCGATTCCGGAAGTGCTTGACATTGGGGAATTC  
AGCGAGAGCCTGACCTATTGCATCTCCCGCCGTGCACAGGGTGTACAGTT  
GCAAGACCTGCCTGAAACCGAACTGCCCCGCTGTTCTGCAGCCGGTCGCGG  
AGGCCATGGATGCGATCGCTGCGGCCGATCTTAGCCAGACGAGCGGGTTC  
GGCCCATTCGGACCGCAAGGAATCGGTCAATACTACATGGCGTGATTT  
CATATGCGCGATTGCTGATCCCCATGTGTATCACTGGCAAACCTGTGATGGA  
CGACACCGTCAAGTGCCTCCGTGCGGCAGGCTCTCGATGAGCTGATGCTTTG  
GGCCGAGGACTGCCCCGAAGTCCGGCACCTCGTGCACGCGGATTTCCGGCT  
CCAACAATGTCCTGACGGACAATGGCCGCATAACAGCGGTCAATTGACTGG  
AGCGAGGCGATGTTTCGGGGATTCCCAATACGAGGTGCGCAACATCTTCTT  
CTGGAGGCCGTGGTTGGCTTGTATGGAGCAGCAGACGCGCTACTTCGAGC  
GGAGGCATCCGGAGCTTGCAGGATCGCCGCGGCTCCGGGCGTATATGCTC  
CGCATTTGGTCTTGACCAACTCTATCAGAGCTTGGTTGACGGCAATTTTCGAT  
GATGCAGCTTGGGCGCAGGGTCGATGCGACGCAATCGTCCGATCCGGAGC  
CGGGACTGTGCGGCGTACACAAATCGCCCGCAGAAGCGCGGCCGTCTGGA  
CCGATGGCTGTGTAGAAGTACTCGCCGATAGTGGAACCGACGCCCCAGC  
ACTCGTCCGAGGGCAAAGGAATAGCACGTGCTACGAGATTTTCGATTCCAC  
CGCCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGG  
CTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCCACCC  
CAACTTGTATTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCAC  
AAATTTACAAATAAAGCATTTTTTTTTCACTGCATTCTAGTTGTGGTTTGTCC  
AACTCATCAATGTATCTTATCATGTCTGTATACCGTCGACCTCTAGCTAG  
AGCTTGGCGTAATCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCG  
CTCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTG  
GGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCC  
CGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCC  
AACGCGCGGGGAGAGGCGGTTTTGCGTATTGGGCGCTCTTCCGCTTCCTCG  
CTCACTGACTCGCTGCGCTCGGTCTGCTCGGCTGCGGCGAGCGGTATCAGCT  
CACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGG  
AAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAG  
GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC  
AAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAA  
GATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGA  
CCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGG  
CGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTC  
GCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGC  
GCCTTATCCGGTAACCTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTA  
TCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGT  
AGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTA  
GAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGA  
AAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGG  
TTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAG  
AAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAAC  
CACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTACCTAG  
ATCCTTTTAAATTAATAAATGAAGTTTTAAATCAATCTAAAGTATATATGAG  
TAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA  
GCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAG

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 24d (con't)

ATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGAT  
ACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGC  
CAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCC  
ATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTTCGCCAGTT  
AATAGTTTTCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGC  
TCGTCTGTTTGGTATGGCTTCATTACAGCTCCGGTTCCCAACGATCAAGGCGA  
GTTACATGATCCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTTCGGTCTT  
CCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATG  
GCAGCACTGCATAATTCTCTTACTGTTCATGCCATCCGTAAGATGCTTTTCT  
GTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCG  
ACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATA  
GCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAA  
CTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGT  
GCACCCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGA  
GCAAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACA  
CGGAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATT  
ATCAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAA  
ATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC  
GTCGACGGATCGGGAGATCTCCCGATCCCTATGGTGCACTCTCAGTACA  
ATCTGCTCTGATGCCGCATAGTTAAGCCAGTATCTGCTCCCTGCTTGTGTG  
TTGGAGGTGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCA  
AGGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTG  
CGCTGCTTCGCGATGTACGGGGCCAGATATACGCGTTGACATTGATTATTGA  
CTAGTTATTAATAGTAATCAATTACGGGGTTCATTAGTTCATAGCCCATATA  
TGGAGTTCCGCGTTACATAACTTACGGTAAATGGCCCGCCTGGCTGACCG  
CCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTA  
ACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTA  
AACTGCCCCTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCC  
CTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTAC  
ATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATC  
GCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATA  
GCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATGACGTCAATGG  
GAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACA  
ACTCCGCCCCATTGACGCAAAATGGGCGGTAGGCGTGTACGGTGGGAGGTC  
TATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTT  
ATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGCGTTT  
AACTTAAGCTTGCCACCATGAAGCTACTGTCTTCTATCGAACAAGCATGC  
GATATTTGCCGACTTAAAAAGCTCAAGTGCTCCAAAGAAAAACCGAAGTG  
CGCCAAGTGTCTGAAGAACAACCTGGGAGTGTGCTACTCTCCCAAAACCA  
AAAGGTCTCCGCTGACTAGGGCACATCTGACAGAAGTGGAATCAAGGCTA  
GAAAGACTGGAACAGCTATTTCTACTGATTTTTCTCGAGAAGACCTTGAC  
ATGATTTTGAAAATGGATTCTTTACAGGATATAAAAGCATTGT

**pKI-Gal4-DBD-GR (SEQ ID NO:76)**

CAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTAC  
TTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAA  
AAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTCCTT  
TTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATAC  
ATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATT  
TCCCCGAAAAGTGCCACCTAAATTGTAAGCGTTAATATTTTGTAAATTC  
GCGTTAAATTTTTGTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATC  
GGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTGAGTGT  
TGTTCCAGTTTGAACAAGAGTCCACTATTAAGAAGCGTGGACTCCAACG  
TCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCA  
TCACCCTAATCAAGTTTTTTGGGGTCGAGGTGCCGTAAAGCACTAAATCG  
GAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCG  
AACGTGGCGAGAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGCTAGG  
GCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCACACCCGCCGC  
GCTTAATGCGCCGCTACAGGGCGCGTCCCATTTCGCCATTCAGGCTGCGCA  
ACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAGCTG  
GCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAACGCCAGGGTT  
TTCCCAGTCACGACGTTGTAAAACGACGGCCAGTGAGCGCGCGTAATACG  
ACTCACTATAGGGCGAATTGGAGCTCCACCGCGGTGCGGCCGGGCCATGC  
AGGCCACGACATGATAAGATACATTGATGAGTTTGGACAAACCACAATA  
GAATGCAGTGAAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTT  
TATTTGTAACCATTATAAGCTGCAATAAACAAGTTCTTGTACAGCTCGTCC  
ATGCCGAGAGTGATCCCGGCGGCGGTACGAACCTCAGCAGGACCATGTG  
ATCGCGCTTCTCGTTGGGGTCTTTGCTCAGGGCGGACTGGTAGCTCAGGTA  
GTGGTTGTCGGGCAGCAGCACGGGGCCGTCGCCGATGGGGGTGTTCTGCT  
GGTAGTGGTCGGCGAGCTGCACGCTGCCGTCCTCGATGTTGTGGCGGATC  
TTGAAGTTCACCTTGATGCCGTTCTTCTGCTTGTCGGCCATGATATAGACG  
TTGTGGCTGTTGTAGTTGTACTCCAGCTTGTGCCCCAGGATGTTGCCGTCC  
TCCTTGAAGTCGATGCCCTTCAGCTCGATGCGGTTACCAGGGTGTGCGCC  
TCGAACTTCACCTCGGCGCGGGTCTTGTAGTTGCCGTCGTCCTTGAAGAAG  
ATGGTGCGCTCCTGGACGTAGCCTTCGGGCATGGCGGACTTGAAGAAGTC  
GTGCTGCTTCATGTGGTTCGGGGTAGCGGGCGAAGCACTGCAGGCCGTAGC  
CGAAGGTGGTCACGAGGGTGGGGCCAGGGCACGGGCAGCTTGCCGGTGGT  
GCAGATGAACTTCAGGGTCAGCTTGCCGTAGGTGGCATCGCCCTCGCCCT  
CGCCGGACACGCTGAACTTGTGGCCGTTTACGTCGCCGTCCAGCTCGACC  
AGGATGGGCACCACCCCGGTGAACAGCTCCTCGCCCTTGCTCACCATGGT  
GGCGTTAGCTTGATTTGACAGTGGCTGGGGGTTGCGCCGCCGGGTTTTATA  
GGAAGCCACAGCGGCCACTCGAGCCATAAAAGGCAACTTTAGGAACGGC  
GGGGGGTGATTGGATTCGAGTCGTTTATTCACCGGCCTTGCCGCACAGTGC  
AGCATTTTTTTTACCCCTCTCCCTCCTTTTTGCGGGGGAAAAA  
AAAAAAGGAGAAGAGAAAAAAGCGAGCGAGAGAGAAAGCGAG  
ATTGAGGAAGAGGATGAAGAGTTTGGCGATGGGTGCTGGTTCGGTAGGCC  
CAGATGGACAAGAATAGCCCCCGCCCTTGCGGACAGTATCCCATTCAGTG  
ACTCAGATCAGATCAAGCGGCCGCAGGCAGCAGCATGAGAACACAAGAA  
TAGGAAGTACATATCCCTTAATGAAAATGAACTAATGTAAATCTGTTGA  
GGAAAAAAATTATAAATCCCACTTTATGTAAGGAATGTATGTGGCATGA  
TTAGATTTTGCTGTGACTGCTTAAAGCTAAATCTGAATGCCCTAATAATA  
AAACCCTAAATTAGGTTAGTTTTATAAACCAGGATAAGTTGGTGTTTCATA

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 25b (con't)

CAAATCTGTTTATGCTTTTAAATTCCACTTAAATGCCTTCAAATTACATATTA  
GAAAGTGACTAAAAACAAATACTGCCAACATGGTATTTTTTAAACAGCA  
TGGTAGGATTATGATGAGTAATAATGTCTTCAGTTTCCCCAGAACTAAAT  
ATATTTACCAGTTAATTTAAAATTGGATCCAACCTACCTAATCTTGTTACAT  
TGTGATGCAGTAGTTTGAACAGTCCTCTTTTTGGCAATAAAAGTCAAGGTG  
ACTTCTGTTTTCTATACAAACAGAAATCTCCTTCATTTTTTATTCTTCTTAG  
ACCAGGGGTATGTGTGTGTGAACCTCCCTGTTTACATTGTACTAATAGCAAT  
AAGCTAGGGGTACGAAAAGTAGTAATACAAGGTAGAAAGTGAGAGTAAC  
TAGGATGTGACTTCTCTGCTGTGTATCTGGTGATGTGAACACCAAGAGTCT  
AAGAGTATGCTGGAAAGGATGGATGGGAATGAAGAGTGTGTGAAGGAAA  
ACAATGGGAGAGGAAGTGAGGTCAGATTCTGGAAAGTCTGAAATCATGC  
AGAATATGTACTGGAGGGTCAGTGGGAAGATACTGAAGACAATCTGTGTA  
CTGGGGAGATATGTGATGCAGTCAGACTGTGCTTGAGGAAGCAAACATTA  
GCCAACATGATGAACGTTACACTGGAGGGAGAAAACGAGTGAGGAAACA  
ACTGCAATGAGGTAAGGGGAAATGGACACCTGAAGTATTTTCGCAGACACA  
GGAATAAGCTTAGAGGATAAGAGAATAGCTGATTTATAAAATCTTAAAGG  
CTTGGTCTTCTCTCAGTTAAACAAAACAAATTTGTTCCCATATTCTTAAAC  
CACAGACACTGGGTGAGCCTTGCCATGCAAAGAGATACCTCTTGTGTCTG  
GGTCCATATGTCCCACCCCATCAGCCTAGATATCCTCATCTACAATTGTCC  
CCACTGAATCCACATGAGTTTTACCATGCTCCTTTTTCTTTCTGGAATAGG  
GTTATGTAAATGATATCACAGTAAGATTCCTTGTTGCTTGCGACAGACTTT  
ACTAACCTCAGATATGCTGTAAATATCCTCAAACATGTCCTGGGACAGTA  
ATAATGCCACATGTACATTTGCTTTACATTACACTTGTCTGCCCCAAGCA  
CTCATAACTCTATTTCCAGTTTGCCTAGATCCTAGATACCTAGTAGGATTG  
TTTCAGTCCTGAATTATCACAATAGCAGTCAATCAGGAAAACATCAGCTG  
GTTAAAGATACCCTATGAATACAGGGAAAATGACACACATACAACCTTACT  
CATTAAATAATCAGATCAGGAGCAAAACACAGCAGGTTTGCACCTTGATTGT  
CTATATGATCTCCACCCCAGAGCAAATGCCATAAGAAACATCCAGGAGTA  
CTGCAGTAGGGTCATTTGGTCATCCAGGTGTAAGTTCCTGAAACCTGAATT  
AAGAGAAATAAAGGTATGAGGCAACACTCTTCAGAAGATCATCTCTGTGG  
GAATTGCCAAGGAGCAATGAGATCAATTAGCCCTGTCAAAACAAGGGCAC  
CCCTAACAGAAAATGGAAATTAATACTAGGTAGACACAGTTTTCTTCTG  
TCATCTGACACTTTAAGACTCACAAACCCTCTTGTGTTTTTTTTTTTTTTT  
TTTTTTAATTGAGACAAAGTCTTGCTCTGTACCCAGGCTGGAGTGCAATG  
GTGCCATCTCGGCTCACTGCAACCTCCGCCTCCCGGGTTCAAGTGATTCTC  
AGTGCCAGCCTCCCAAGTAGCTAGGAATACAGATTCATACCACCATGCCC  
GGCTAATTTTTGTAAATTTAGTAGAGATGGGGTTTTGCTATGCTGGCCAGG  
CTGGTCTCGAACTCCTGACCTCAACTGATCCACCCACCTGGGCTTCCCAA  
GTGCTGGGATTACAGGCGTGAGCCATCGCACCCAGCCCCCTAGGTGCTTTT  
TAATAGCTTTTAATGTAAAAAAGCCAGTTTTGTACCTC  
TGTCTGCTTAAGTAAACATGAACATAAGTAAATAGCCAAAATTCTTG  
GCTTGGCGGTTACCAGTGACCGGGAAAGATAGTGGTGATGGGGATGAAGC  
GGGAATGGTTGACGGGTGCAAAAATACAGTTAGAAGAAATAAGTTTTAGT  
GTTCAGTAGCACAACAGGATGACTATAGTTAACAATAATTTACTTTATATT  
TCAAAATAGCTAAAAGAGAAGATTTGGAATGTTCCCCAAACAATGTTTG  
AGGTGATGGATATCCCAGTTACTCTGATTTGATCCTTACACGTTGTATGCT  
TTTATTAAATTATTACATGTACCCCTAAATATAAATATGTACAGTAAATA  
TGTACAACCTATTATGTATTGATTTAAAAAACAGAAAAGAATCTTGGCTTG  
AGGTATTAATCAATGAGTTAAGCAAAACATTTGCCCTGCTATTCACACCTC  
TTTCCCCCTTAATAAAACAAGGATGACAGGAGGTCAGGTTACTTTCTTGCT

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 25c (con't)

CTCTCCCTAACTATTTGCGTGAACACAGGCTTGTCAATTCCCTGTCTTTAA  
AGTCAGAGCTGACACTAACATTGACCTCTGCCATTCCACACCAAATTCCA  
ATAGGGTAACCTTTTATTTAAAATTATCTTTAAAATTACATTCAATGTGTAG  
CATTTCAATTTAGTGAAGGGTTAAAATCATTCTACTTTAGTACAAATTTTGA  
CAATCAACATACTTGATGTTTACCAATCTTACAAACAACCTGATTTTAAA  
AGTGGCACAATGAAGGAAAACAAATGGAATTAATAAAAACATTTTCTTT  
CCCCAACTTCAGTGTAAGGAGTTTTGAGTGAGTCTTGTAACCTTGAATT  
CTGATATTACATCATCCTATGTGAAATTACCATCCTGTGCATAATGATTTG  
AAAAGCAGGGAGTAATGTAAATGTTTTATTATAAACTCCCTATCACCTGTA  
TTCACCTGACTCTCCCCTTCATAGTCCCAGAACTAAGAGAAACAAGATA  
AGCCATGGGCTCACGATGATATAAAAGCCAAAGTGTTTTTGCTGAAGAAA  
ACACAAAGGTTTATATAGTTGCTCTTTTATGTTTTGCATCTTACCTGGTATT  
GCCTTTGCCCATTTCCTGCTGCAATCACTTGCCGCCCTCCTAACATGTTG  
AGCGTAGTCATGATCCTCCAAGTTGAGTCTGGAACAGAGCTATCATATCCT  
GCATATAACACTTCAGGTTCAATAACCTCCAACAGTGACACCAGGGTAGG  
GGTGAGTTGTGGTAACGTTGCAGGAACCTATTGTTTTGTTACCAGGATTTTC  
AGAGGTTTCTTGAGACTCCTGTAGTGGCCTGCTGAATGGTACCCGGCG  
ATACAGTCAACTGTCTTTGACCTTTGTTACTACTCTCTTCCGATGATGATGT  
CGCACTTATTCTATGCTGTCTCAATGTTAGAGGCATATCAGTCTCCACTGA  
AGCCAATCTATCTGTGACGGCATCTTTATTACATTATCTTGTACAAATAA  
TCCTGTTAACAATGCTTTTATATCCTGTAAAGAATCCATTTTCAAATCAT  
GTCAAGGTCTTCTCGAGGAAAAATCAGTAGAAATAGCTGTTCCAGTCTTTC  
TAGCCTTGATTCCACTTCTGTGAGATGTGCCCTAGTCAGCGGAGACCTTTT  
GGTTTTGGGAGAGTAGCGACACTCCAGTTGTTCTTCAGACACTTGGCGCA  
CTTCGGTTTTTTCTTTGGAGCACTTGAGCTTTTTTAAGTCGGCAAATATCGCA  
TGCTTGTTTCGATAGAAGACAGTAGCTTCATGGTGGCAAGCTTAAGTTTAA  
ACGCTAGAACTAGTGGATCCGGATAAGCCAGTAAGCAGTGGGTTCTCTAG  
TTAGCCAGAGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGC  
CCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTT  
GATTTTGGTGCCAAAACAACTCCCATTTGACGTCAATGGGGTGGAGACTT  
GGAAATCCCCGTGAGTCAAACCGCTATCCACGCCCATTTGATGTACTGCCA  
AAACCGCATCACCATGGTAATAGCGATGACTAATACGTAGATGTACTGCC  
AAGTAGGAAAGTCCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGC  
CATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACT  
TGATGTACTGCCAAGTGGGCAGTTTACCGTAAATACTCCACCCATTGACGT  
CAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGTCAATTATTGAC  
GTCAATGGGCGGGGGTTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGT  
AAGTTATGTAACGCGGAACCTCCATATATGGGCTATGAACTAATGACCCCG  
TAATTGATTACTATTAATAACTAGTCAATAATCAATGTCAACCCCGGGCTG  
CAGGAATTCTACCGGGTAGGGGAGGCGCTTTTCCCAAGGCAGTCTGGAGC  
ATGCGCTTTAGCAGCCCCGCTGGCACTTGGCGCATCACAAGTGGCCTCTG  
GCCTCGCACACATTCCACATCCACCGGTAGCGCCAACCGGCTCCCTTCTTT  
GGTGGCCCCCTTCGCGCCACCTTCTACTCCTCCCCTAGTCAGGAAGTTCCCC  
CCCGCCCCCGCAGCTCGCGTCGTGCAGGACGTGACAAATGGAAGTAGCACG  
TCTCACTAGTCTCGTGCAGATGGACAAGCACCGCTGAGCAATGGAAGCGG  
GTAGGCCTTTGGGGCAGCGGCCAATAGCAGCTTGGCTCCTTCGCTTCTGG  
GCTCAGAGGCTGGGAAGGGGTGGGTCCGGGGGCGGGGCTCAGGGGCGGGC  
TCAGGGGCGGGGCGGGCGGAAGGTCCCTCCGGACCCGGCATTCTGCACGC  
TTCAAAGCGCACGTCTGCCGCGCTGTTCTCCTCTTCCTCATCTCCGGGCC  
TTCGACCTGCATGAAAAAGCCTGAACTCACCGCGACGTCTGTGAGAAGT

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig. 25d (con't)

TTCTGATCGAAAAGTTTCGACAGCGTCTCCGACCTGATGCAGCTCTCGGAG  
GGCGAAGAATCTCGTGCTTTTCAGCTTTCGATGTAGGAGGGCGTGGATATGT  
CCTGCGGGTAAATAGCTGCGCCGATGGTTTCTACAAAGATCGTTATGTTTA  
TCGGCACTTTGCATCGGCCGCGCTCCCGATTCCGGAAGTGCTTGACATTGG  
GGAATTCAGCGAGAGCCTGACCTATTGCATCTCCCGCCGTGCACAGGGTG  
TCACGTTGCAAGACCTGCCTGAAACCGAACTGCCCGCTGTTCTGCAGCCG  
GTCGCGGAGGCCATGGATGCGATCGCTGCGGCCGATCTTAGCCAGACGAG  
CGGGTTTCGGCCCATTCGGACCGCAAGGAATCGGTCAATACACTACATGGC  
GTGATTTTCATATGCGCGATTGCTGATCCCCATGTGTATCACTGGCAAACCTG  
TGATGGACGACACCGTCAGTGCGTCCGTCGCGCAGGCTCTCGATGAGCTG  
ATGCTTTGGGCCGAGGACTGCCCCGAAGTCCGGCACCTCGTGACGCGGA  
TTTCGGCTCCAACAATGTCCTGACGGACAATGGCCGCATAACAGCGGTCA  
TTGACTGGAGCGAGGCGATGTTTCGGGGATTCCCAATACGAGGTCGCCAAC  
ATCTTCTTCTGGAGGCCGTGGTTGGCTTGTATGGAGCAGCAGACGCGCTAC  
TTCGAGCGGAGGCATCCGGAGCTTGCAGGATCGCCGCGGCTCCGGGCGTA  
TATGCTCCGCATTGGTCTTGACCAACTCTATCAGAGCTTGGTTGACGGCAA  
TTTCGATGATGCAGCTTGGGCGCAGGGTCGATGCGACGCAATCGTCCGAT  
CCGGAGCCGGGACTGTGCGGCGTACACAAATCGCCCGCAGAAGCGCGGC  
CGTCTGGACCGATGGCTGTGTAGAAGTACTCGCCGATAGTGGAACCGAC  
GCCCCAGCACTCGTCCGAGGGCAAAGGAATGCCTGAGAAAGGAAGTGAG  
CTGTAAAGGCTGAGCTCTCTCTGACGTATGTAGCCTCTGGTTAGCTTCG  
TCACTCACTGTTCTTGACTCAGCATGGCAATCTGATGAAATCCCAGCTGTA  
AGTCTGCATAAATTGATGATCTATTAACAATAAAGATGTCCACTAAAAT  
GGAAGTTTTTTACTGTCATACTTTGTAAAGAAGGGTGAGAACAGAGTACCT  
ACATTTTGAATGGAAGGATTGGAGCTACGGGGGTGGGGGTGGGGGTGGG  
ATTAGATAAATGCCTGCTCTTTACTGAAGGCTCTTTACTATTGCTTTATGAT  
AATGTTTCATAGTTGGATATCATAATTTAAACAAGCAAAACCAAATTAAG  
GGCCAGCTCATTCCCTCCACTCATGATCTATAGATCTATAGATCTCTCGTGG  
GATCATTGTTTNTCTGATCCACTGGAAGCTTATCGATACCGTCGACCTCGA  
GGGGGGGCCCGGTACCCAGCTTTTGTTCCTTTAGTGAGGGTTAATTGCGC  
GCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGC  
TCACAATTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGG  
GGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCC  
GCTTTCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCA  
ACGCGCGGGGAGAGGCGGTTTTCGTATTGGGCGCTCTTCCGCTTCCTCGCT  
CACTGACTCGCTGCGCTCGGTTCGTTTCGGCTGCGGCGAGCGGTATCAGCTC  
ACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGG  
AAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAG  
GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAC  
AAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAA  
GATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGA  
CCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGG  
CGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCTGTC  
GCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGCCCGACCGCTGC  
GCCTTATCCGGTAACATCGTCTTGAGTCCAACCCGGTAAGACACGACTTA  
TCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGT  
AGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTA  
GAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGA  
AAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGG  
TGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTC

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 25e (con't)

AAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAA  
AACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCAC  
CTAGATCCTTTTAAATTAAAAATGAAGTTTAAATCAATCTAAAGTATATA  
TGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTAT  
CTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTG  
TAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAAT  
GATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACC  
AGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCC  
TCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCCGCCA  
GTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCA  
CGCTCGTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGG  
CGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGT  
CCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTT  
ATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTT  
TCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCG  
GCGACCGAGTTGCTCTTGCCCCGGCGTCAATACGGGATAATACCGCGCCAC  
ATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGA  
AAACTCTCAAGGATCTTACCGCTGTTGAGATC

**MR region of homology (SEQ ID NO:77)**

TTTGTGGTGCTTAAAAAATGAGCATGTGGTGCCTCCTATGGTCCAGGTAA  
TACCAGACTTTGATAAAGTTCTATGGTAGAACATGTTCCCTGGCACCTGT  
CCTCCCTGCCTGACAGACTCAAGCTCTTCTTTTGTCTTTATTTTATTTATTT  
ATTTTTTAAGATGGATTCTCATTCTGTGCGCCAGGCTGGAGTTCAGTGACA  
TGATATTGGCTCACTGCATCCCAGGTTTCAAGCGATTCTCCTGCCTCAGGC  
TCACAAGTAGCTGGGGTTACAGGTGCCTGCCAGGACGCCCAACTAAATTT  
TGTATTTTTAGTAGAGACAGGGTTTCATGATGGTGGCAAGGCTGGTCTCAA  
ATTCCTGACCTCAAGTGATCTGCTTGCCTCAGCCTCCCAAAGTCTGGGATT  
ACAGGCATGGGCCACTGCACCAGGCCTTCTTTTGTTTTTATCACCTCCCC  
CATCTCCAGGGGCATCATGTTATTTTTCTGCCTGTGGAGTTTCACTGGGCA  
AGCTCCTCTTCAAAGAATCAGTCAGTGGAGCTTTCCCCAACTTTTACAGCT  
GCTGTCTGACCACAGGTAATCTAAGAAACTGCTTTAGATTAATGAACTGG  
GACAATGTAATGGCAATTTCTAAGTGATGTTTCTGTAGATTAAGAGGGGC  
CTTATTAATTAATAACCATGAAACAAAAAATGACTAAAATAGGAATT  
CCAGGGACAATTTAAAGGGTGCTGGGGGCCAGGTGATTATTTTTTAGACA  
GAAGAGTCATTCCAGGTCTCTTACAACCTACTTGCTAGGCCTTGCCTTACT  
TGGTCTACACTTAGATTAACCCTCGTTATGAGCCGCTAATAATGTGCTCAA  
CTTGTGATTTTCATGAACAGAATGTATTTTACCTTATTAATATTTTTGGATGA  
AATTTTCCATTTTGATCAACATAAGAAGTGATGTCATTTTTTTTATTTTA  
ATTTCTTTTTTTTTTTTGGAGACAGAGTCTCACTCTGTTGCTCAGGCTGGAGT  
ATAGTGGTGGGATCTCGGCTCACTGCAGCCTCTGCCGCCAGGTTCAAGC  
GATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCTGCCAC  
CAAGCAGGACTAATTTTTGTGTTTTTAGTAGAAACGGGGTTTACCATCTT  
GGCTAGGCTGGTCTTGAACCTCCTGACCTCGTGATCCATCTGCCTCAGTAAG  
CCACCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTG  
CGCCCAGCCGTATCTGTCAATTTTAACAATAAAATCCTTAACCCTGCATTCT  
CGGAAGAAATGAGCACATTAACCATATTTTTCCTATACACTTGATCAATTT  
GTTATCAATTTAAAAAATCTGATATCAGGATTTTCATAGAACGCAAACCTCCT  
CCTGCATGGTTGGAGATGGCGAAGTCAGTTGCCCAGACTTGTTAAGTTCA  
GGATGCAGCCTGTGAAAGGAGAGGCAATCCTACCTGGAAGTACCTTTGCC  
CACTTCACGACTTGGATCATCTGTTTGCCTGCTAAGCGGTTGAGCGTGAGAG  
AGCAGATTTTCGGCTGTATCTGGTTTTGAGCTGTCATAGCCTGCATATACA  
ATTTCAAGTTCAATGTTTTCAAGGACCATAACGGGGGAAGGTGTGAGCGC  
TCGTGAGATTGTGGAGAGCTGAGGAACCAAGTGCTGTGTTGACCGAGGGTT  
CTTTTGCAGGAGCGATGTACGTTGTCCCTTCCTCTGGGCTTTGCGGGGGTG  
GGGGTGGGGGTGGGGGCTGCTGCTGCTGTGGCTGCTCCTCGTGAATCCCTT  
TCTTTTCATCTTTTGCATTACTTTTCTTGCTTTCATCACCAACCTATTTCTCA  
TCTGCCTCCTCCCCTACTGAAACCCCTGTTTTCTTATTGCCAGAGAGAGCC  
ATCTGTCAGAATATGGCTGTAGTTACTATCATAATTCAAATATTCCTTTT  
AAGTATTTCTTGACCCAACAATTACAAAGAAGCACTGCTAGATACAAACA  
TAAATAAAATGTGCTAATGAGGAATGCAAACAGTATTAAATGTAAACTT  
AAAATAGGAAGGAATTTGTGGCCAAAGAAAAAAGTATTACGATTCTTTCA  
GTCTTTTAAATGCATCATAAACTAAAAATGTTTTGCTACAGAATAACA  
GTTTGGCTTCTTTTATGATGGCAAAGAAGGGTAATTACGATTGTCATGAAA  
ACACATTGAGCAGCTGTATACTGTTAACAAAAGAACCATTATATGAGCTC  
GTAAAAGCTGGCACTTTATATATTACATTTCTTAGAAATTAGATTGTCTT  
CCCAATTGGAGTCGATACCAAAGAGACTGTTTTCTATTAATTGTGGCTTT  
GTACCAGTCAATTTTCAGAGCCAACCTGGATCATCTTTCTTTTGGGATATAT

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 26b (con't)

CCCACATATTATTATGTGGAATTTATATATACTGATTTATATACACTCAGA  
AGCATACAGTATAATGTTGCAAAGAGTAATTTTTTAAGTTCCCAGAGATCT  
GTAAATTTTTAACGTTAAAAAATGCCAGTTTCAGTAGATTCTTTCACCAAC  
GTACATCTGTTTAGAAATTACTGAAAGAAATCATAACGCATAACTCTGCA  
GTTTATTTTATGAAGGCTAATTAATAGGTACTTACTCATTAAAGACTAGGT  
CTGGTGCAAAATAGAGAAATTGGCTGTTTCGTATGTTTGTACGATCTCCAGC  
TCAAGGCAAATGATGATAGACACATCCAAGAATACTGGATTAGGGTAATT  
TGGTCCTCAAGAGGCAAGTTTTTAAATCCTGAAGAACAAAACAATTAATC  
ACAGAAATACACTTAGCATTTAAGTACATTCCAGGAAGATGCTTCTTAAG  
TCAACCCCAAACAGCCACCTTTCTTTCACTTTTCTCTTTTCTGACAGACTCA  
AATCAATTCAACAGTCATTTACAGAGTGCCCACCACTGGCCCAGTCCTGTT  
CCACATTTCACTTTAAATTCATCCTAAATTCTAGATGAGGGTAAACTGCCA  
GGGCAAACCTAAAATTGCAAAGTTCAGCAAGTTTCAGTGTGGATGACAGCC  
TAAAACCCCTGGTTAGATTGAGAGAATTTGTATTAACTGTAAAACCTTGCT  
TCGTCCCACCCACAATTAATAACACTAAAATAAAGGGTAATTTAATAACT  
GTCAAACCCTGTGTATCTGCAATAATGGTGGGAGATTCATTGTTTCATGAG

**pCDGal4-DBD-MR (SEQ ID NO:78)**

AGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTTCTGT  
GACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGAC  
CGAGTTGCTCTTGCCCGGCGTCAATACGGGATAAATACCGCGCCACATAGC  
AGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAAC  
CTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGC  
ACCCAACCTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGC  
AAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACG  
GAAATGTTGAATACTCATACTCTTCCTTTTTCAATATTATTGAAGCATTTAT  
CAGGGTTATTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAAT  
AAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGACGT  
CGACGGATCGGGAGATCTCCCGATCCCCTATGGTGCACCTCTCAGTACAAT  
CTGCTCTGATGCCGCATAGTTAAGCCAGTATCTGCTCCCTGCTTGTGTGTT  
GGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAA  
GGCTTGACCGACAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGC  
GCTGCTTCGCGATGTACGGGCCAGATATACGCGTTGACATTGATTATTGAC  
TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATAT  
GGAGTTCGCGGTTACATAACTTACGGTAAATGGCCCCGCCTGGCTGACCGC  
CCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTA  
ACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTA  
AACTGCCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCC  
CTATTGACGTCAATGACGGTAAATGGCCCCGCCTGGCATTATGCCCAGTAC  
ATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATC  
GCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAATGGGCGTGGATA  
GCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGG  
GAGTTTGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACA  
ACTCCGCCCCATTGACGCAAAATGGGCGGTAGGCGTGTACGGTGGGAGGTC  
TATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTT  
ATCGAAATTAATACGACTCACTATAGGGAGACCCAAGCTGGCTAGCGTTT  
AACTTAAGCTTGCCACCATGAAGCTACTGTCTTCTATCGAACAAGCATGC  
GATATTTGCCGACTTAAAAAGCTCAAGTGCTCCAAAGAAAAACCGAAGTG  
CGCCAAGTGTCTGAAGAACAACCTGGGAGTGTGCTACTCTCCCAAAACCA  
AAAGGTCTCCGCTGACTAGGGCACATCTGACAGAAGTGGAATCAAGGCTA  
GAAAGACTGGAACAGCTATTTCTACTGATTTTTCTCGAGAAGACCTTGAC  
ATGATTTTGAAAATGGATTCTTTACAGGATATAAAAGCATTGTTAACAGG  
ATTATTTGTACAAGATAATGTGAATAAAGATGCCGTCACAGATAGATTGG  
CTTCAGTGGAGACTGATATGCCTCTAACATTGAGACAGCATAGAATAAGT  
GCGACATCATCATCGGAAGAGAGTAGTAACAAAGGTCAAAGACAGTTGA  
CTGTATCGCCGGGTACCTTTGTGGTGCTTAAAAAATGAGCATGTGGTGCCT  
CCTATGGTCCAGGTTAATACCAGACTTTGATAAAGTTCTATGGTAGAACAT  
GTTTCCCTGGCACCTGTCCTCCCTGCCTGACAGACTCAAGCTCTTCTTTTGT  
TCTTTATTTTATTTATTTATTTTTTAAGATGGATTCTCATTCTGTGCCCCAG  
GCTGGAGTTCAGTGACATGATATTGGCTCACTGCATCCCAGGTTTCAAGCG  
ATTCTCCTGCCTCAGGCTCACAAGTAGCTGGGGTTACAGGTGCCTGCCAG  
GACGCCCAACTAAATTTTGTATTTTATAGTAGAGACAGGGTTTCATGATGGT  
GGCAAGGCTGGTCTCAAATTCCTGACCTCAAGTGATCTGCTTGCCTCAGCC  
TCCCAAAGTCTGGGATTACAGGCATGGGCCACTGCACCAGGCCTTCTTTTG  
TTTTTTATCACCTCCCCCATCTCCAGGGGCATCATGTTATTTTTCTGCCTGT  
GGAGTTTCACTGGGCAAGCTCCTCTTCAAAGAATCAGTCAGTGGAGCTTTC

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 27b (con't)

CCCAACTTTTACAGCTGCTGTCTGACCACAGGTAATCTAAGAACTGCTTT  
AGATTAATGAACTGGGACAATGTAATGGCAATTTCTAAGTGATGTTTCTGT  
AGATTAAGAGGGGCCCTTATTAATTAAATACCATGAAACAAAAAATGA  
CTAAAATAGGAATTCCAGGGACAATTTAAAGGGTGCTGGGGGCCAGGTGA  
TTATTTTTTACAGACAAGAGTCATTCCAGGTCTCTTACAACCTTACTTGCTA  
GGCCTTGCCTTACTTGGTCTACACTTAGATTAACCCTCGTTATGAGCCGCT  
AATAATGTGCTCAACTTGTGATTTTCATGAACAGAATGTATTTTACCTTATT  
AATATTTTTGGATGAAATTTTCCATTTTGATCAACATAAGAAGTGATGTC  
ATTTTTTTTATTTTTAATTTCTTTTTTTTTTTTGAGACAGAGTCTCACTCTGT  
TGCTCAGGCTGGAGTATAGTGGTGGGATCTCGGCTCACTGCAGCCTCTGCC  
GCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTA  
CAGGCACCTGCCACCAAGCAGGACTAATTTTTGTGTTTTTAGTAGAAACG  
GGGTTTCACCATCTTGGCTAGGCTGGTCTTGAACCTCCTGACCTCGTGATCC  
ATCTGCCTCAGTAAGCCACCTGCCTTGGCCTCCCAAAGTGCTGGGATTACA  
GGCGTGAGCCACTGCGCCCAGCCGTATCTGTCAATTTTAACAATAAAATCCT  
TAACCCTGCATTCTCGGAAGAAATGAGCACATTAACCATATTTTTCTATA  
CACTTGATCAATTTGTTATCAATTTAAAAAATCTGATATCAGGATTTTATA  
GAACGCAAACCTCCTCCTGCATGGTTGGAGATGGCGAAGTCAGTTGCCAG  
ACTTGTTAAGTTCAGGATGCAGCCTGTGAAAGGAGAGGCAATCCTACCTG  
GAAGTACCTTTGCCCACTTCACGACTTGGATCATCTGTTTGCCTGCTAAGC  
GGTTGAGCGTGGAGAGCAGATTTTCGGCTGTATCTGGTTTTGAGCTGTCAT  
AGCCTGCATATACAATTCAGGTTCAATGTTTTCAAGGACCATAACGGGG  
GAAGGTGTGAGCGCTCGTGAGATTGTGGAGAGCTGAGGAACCAAGTGCTGT  
GTTGACCGAGGGTTCTTTTGCAGGAGCGATGTACGTTGTCCCTTCCTCTGG  
GCTTTGCGGGGGTGGGGGTGGGGGTGGGGGCTGCTGCTGCTGTGGCTGCT  
CCTCGTGAATCCCTTTCTTTTCATCTTTTGCATTACTTTTCTTGCTTTTATCA  
CCAACCTATTTCTCATCTGCCTCCTCCCTACTGAAACCCCTGTTTTCTAT  
TGCCAGAGAGAGCCATCTGTCAGAATATGGCTGTAGTTACTATCATAATTC  
AAATATTCCTTTTAAGTATTTCTTGACCCAACAATTACAAAGAAGCACTG  
CTAGATACAAACATAAATAAAATGTGCTAATGAGGAATGCAAACAGTATT  
AAAATGTAAACTTAAATAGGAAGGAATTTGTGGCCAAAGAAAAACTGA  
TTACGATTCTTTCAGTCTTTTAAATGCATCATAAACTAAAAATGTTTTG  
CTACAGAATAACAGTTTGGCTTCTTTTATGATGGCAAAGAAGGGTAATTA  
CGATTGTCATGAAAACACATTGAGCAGCTGTATACTGTTAACAAAAGAAC  
CATTATATGAGCTCGTAAAAGCTGGCACTTTATATATTCACATTTCTAGA  
AATTAGATTGTCTTCCCAATTGGAGTCGATACCAAAGAGACTGTTTTCTA  
TTAATTGTGGCTTTGTACCAGTCAATTTTCAGAGCCAACCTGGATCATCTTT  
CTTTTGGGATATATCCACATATTATTATGTGGAATTTATATATACTGATTT  
ATATACACTCAGAAGCATAACAGTATAATGTTGCAAAGAGTAATTTTTTAA  
GTTCCCAGAGATCTGTAAATTTTTAACGTTAAAAAATGCCAGTTTCAGTAG  
ATTCTTTCACCAACGTACATCTGTTTAGAAATTACTGAAAGAAATCATAAC  
GCATAACTCTGCAGTTTATTTTATGAAGGCTAATTAATAGGTACTTACTCA  
TTAAAGACTAGGTCTGGTGCAAATAGAGAAATTGGCTGTTTCGTATGTTT  
GTACGATCTCCAGCTCAAGGCAAATGATGATAGACACATCCAAGAATACT  
GGATTAGGGTAATTTGGTCCTCAAGAGGCAAGTTTTTAAATCCTGAAGAA  
CAAAACAATTAATCACAGAAATACACTTAGCATTTAAGTACATTCCAGGA  
AGATGCTTCTTAAGTCAACCCCAAACAGCCACCTTTCTTTCACTTTTCTCTT  
TTCTGACAGACTCAAATCAATTCAACAGTCATTTACAGAGTGCCCACT  
GGCCAGTCCTGTTCCACATTTCACTTTAAATTCATCCTAAATTCTAGATG  
AGGGTAAACTGCCAGGGCAAACATAAATTGCAAAGTTCAGCAAGTTTCAG

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 27c (con't)

TGTGGATGACAGCCTAAAACCCTTGGTTAGATTGAGAGAATTTGTATTAA  
CCTGTAAAACCTTGCTTCGTCCCACCCACAATTAATAACACTAAAATAAAG  
GGTAATTTAATAACTGTCAAACCCTGTGTATCTGCAATAATGGTGGGAGA  
TTTCATTGTTTCATGAGGCGGCCGCTCGAGTCTAGAGGGCCCGTTTAAACCC  
GCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCC  
CCTCCCCCGTGCCTTCCTTGACCCTGGAAGGTGCCACTCCCCTGTCCTTT  
CCTAATAAAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCATTCTA  
TTCTGGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGA  
CAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGGCTTCTGAGGCGG  
AAAGAACCAGCTGGGGCTCTAGGGGGTATCCCCACGCGCCCTGTAGCGGC  
GCATTAAGCGCGGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACT  
TGCCAGCGCCCTAGCGCCCGCTCCTTTTCGCTTTCTTCCCTTCCTTTCTCGCC  
ACGTTGCGCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGCTCCCTTTAGGG  
TTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAACTTGATTAGGGT  
GATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTG  
ACGTTGGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACA  
ACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCG  
ATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAACGC  
GAATTAATTCTGTGGAATGTGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGG  
CTCCCCAGCAGGCAGAAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAA  
CCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCAAAGC  
ATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACTCCGCCCATC  
CCGCCCTAACTCCGCCCAGTTCCGCCCATCTCCGCCCATGGCTGACTA  
ATTTTTTTTTATTTATGCAGAGGCCGAGGCCGCTCTGCCTCTGAGCTATTC  
CAGAAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCT  
CCCGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGATGAAAA  
AGCCTGAACTCACCGCGACGTCTGTGCGAGAAGTTTCTGATCGAAAAGTTC  
GACAGCGTCTCCGACCTGATGCAGCTCTCGGAGGGCGAAGAATCTCGTGC  
TTTCAGCTTCGATGTAGGAGGGCGTGGATATGTCCTGCGGGTAAATAGCT  
GCGCCGATGGTTTCTACAAAGATCGTTATGTTTATCGGCACTTTGCATCGG  
CCGCGCTCCCGATTCCGGAAGTGCTTGACATTGGGGAATTCAGCGAGAGC  
CTGACCTATTGCATCTCCCGCCGTGCACAGGGTGTACGTTGCAAGACCTG  
CCTGAAACCGAACTGCCCCGCTGTTCTGCAGCCGGTCGCGGAGGCCATGGA  
TGCGATCGCTGCGGCCGATCTTAGCCAGACGAGCGGGTTCGGCCCATTCTG  
GACCGCAAGGAATCGGTCAATACTACATGGCGTGATTTTCATATGCGCG  
ATTGCTGATCCCCATGTGTATCACTGGCAAACCTGTGATGGACGACACCGTC  
AGTGCGTCCGTGCGCGAGGCTCTCGATGAGCTGATGCTTTGGGCCGAGGA  
CTGCCCCGAAGTCCGGCACCTCGTGCACGCGGATTTCCGGCTCCAACAATG  
TCCTGACGGACAATGGCCGCATAACAGCGGTCAATTGACTGGAGCGAGGCG  
ATGTTTCGGGGATTCCCAATACGAGGTGCGCAACATCTTCTTCTGGAGGCCG  
TGGTTGGCTTGTATGGAGCAGCAGACGCGCTACTTCGAGCGGAGGCATCC  
GGAGCTTGCAGGATCGCCGCGGCTCCGGGCGTATATGCTCCGCATTGGTC  
TTGACCAACTCTATCAGAGCTTGGTTGACGGCAATTTTCGATGATGCAGCTT  
GGGCGCAGGGTCGATGCGACGCAATCGTCCGATCCGGAGCCGGGACTGTC  
GGGCGTACACAAATCGCCCGCAGAAGCGCGGCCGTCTGGACCGATGGCTG  
TGTAGAAGTACTCGCCGATAGTGGAACCGACGCCCCAGCACTCGTCCGA  
GGGCAAAGGAATAGCACGTGCTACGAGATTTTCGATTCCACCGCCGCCTTC  
TATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCGCGGCTGGATGAT  
CCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCACCCCAACTTGTT  
TATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCA

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 27d (con't)

CAAATAAAGCATT TTTTTC ACTGCATTCTAGTTGTGGTTTGTCCAAACTCA  
TCAATGTATCTTATCATGTCTGTATACCGTCGACCTCTAGCTAGAGCTTGG  
CGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGTTATCCGCTCACAA  
TTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCC  
TAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCCGCTTTC  
CAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGC  
GGGGAGAGGCGGTTTTCGTATTGGGCGCTCTTCCGCTTCCTCGCTCACTGA  
CTCGCTGCGCTCGGTTCGTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAA  
AGGCGGTAAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAA  
CATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCG  
TTGCTGGCGTTTTCATAGGCTCCGCCCCCTGACGAGCATCACAAAAT  
CGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACC  
AGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGC  
CGCTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGCGCTTT  
CTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCA  
AGCTGGGCTGTGTGCACGAACCCCCCGTTACGCCCCGACCGCTGCGCCTTAT  
CCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCA  
CTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCG  
GTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGA  
ACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAG  
AGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTTTTTT  
TGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATC  
CTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACCTCACGTT  
AAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTT  
TAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACT  
TGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATC  
TGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACT  
ACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCG  
AGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCG  
GAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAG  
TCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGT  
TTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCG  
TTTGGTATGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACA  
TGATCCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATC  
GTTGTCAGAAGTAAGTT

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VP/02-143 US2

Fig. 28a

**pKI-Gal4-DBD-MR (SEQ ID NO:79)**

ATCGGACGATTGCGTCGCATCGACCCTGCGCCCAAGCTGCATCATCGAAATTGCCGT  
CAACCAAGCTCTGATAGAGTTGGTCAAGACCAATGCGGAGCATATACGCCCCGAGC  
CGCGGCGATCCTGCAAGCTCCGGATGCCTCCGCTCGAAGTAGCGCGTCTGCTGCTCC  
ATACAAGCCAACCACGGCCTCCAGAAGAAGATGTTGGCGACCTCGTATTGGGAATC  
CCCGAACATCGCCTCGCTCCAGTCAATGACCGCTGTTATGCGGCCATTGTCCGTCAG  
GACATTGTTGGAGCCGAAATCCGCGTGCACGAGGTGCCGGACTTCGGGGCAGTCCT  
CGGCCCAAAGCATCAGCTCATCGAGAGCCTGCGCGACGGACGCACTGACGGTGTCG  
TCCATCACAGTTTGCCAGTGATACACATGGGGATCAGCAATCGCGCATATGAAATCA  
CGCCATGTAGTGTATTGACCGATTCCCTTGCGGTCCGAATGGGCCGAACCCGCTCGTC  
TGGCTAAGATCGGGCCGAGCGATCGCATCCATGGCCTCCGCGACCGGCTGCAGAAC  
AGCGGGCAGTTCGGTTTCAGGCAGGTCTTGCAACGTGACACCCTGTGCACGGCGGG  
AGATGCAATAGGTCAGGCTCTCGCTGAATTCCCCAATGTCAAGCACTTCCGGAATCG  
GGAGCGCGGCCGATGCAAAGTGCCGATAAACATAACGATCTTTGTAGAAACCATCG  
GCGCAGCTATTTACCCGCAGGACATATCCACGCCCTCCTACATCGAAGCTGAAAGCA  
CGAGATTCTTCGCCCTCCGAGAGCTGCATCAGGTCCGAGACGCTGTGCAACTTTTCG  
ATCAGAACTTCTCGACAGACGTCGCGGTGAGTTCAGGCTTTTTTCATGCAGGTGCAA  
GGCCCCGAGATGAGGAAGAGGAGAACAGCGCGGCAGACGTGCGCTTTTGAAGCGT  
GCAGAATGCCGGGTCCGGAGGACCTTCGCGCCCCGCCCGCCCCCTGAGCCCCCCCCCT  
GAGCCCCCCCCCGGACCCACCCCTTCCCAGCCTCTGAGCCCAGAAAGCGAAGGAGC  
CAAGCTGCTATTGGCCGCTGCCCCAAAGGCCTACCCGCTTCCATTGCTCAGCGGTGC  
TTGTCCATCTGCACGAGACTAGTGAGACGTGCTACTTCCATTTGTCACGTCCTGCAC  
GACGCGAGCTGCGGGGCGGGGGGGAACCTTCCTGACTAGGGGAGGAGTAGAAGGTG  
GCGCGAAGGGGGCCACCAAAGAAGGGAGCCGGTTGGCGCTACCGGTGGATGTGGAAT  
GTGTGCGAGGCCAGAGGCCACTTGTGATGCGCCAAGTGCCAGCGGGGCTGCTAAAG  
CGCATGCTCCAGACTGCCTTGGGAAAAGCGCCTCCCCTACCCGGTAGAATTCCCTGCA  
GCCCCGGGTTGACATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCA  
TTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAACTTACGGTAAATGGCCCCG  
CCTGGCTGACCGCCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCC  
ATAGTAACGCCAATAGGGACTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAA  
ACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGAC  
GTCAATGACGGTAAATGGCCCCGCTGGCATTATGCCCAGTACATGACCTTATGGGAC  
TTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGT  
TTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCGAAGTC  
TCCACCCCATGACGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTC  
CAAAATGTCGTAACAACCTCCGCCCATGACGCAAATGGGCGGTAGGCGTGTACGG  
TGGGAGGTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGG  
CTTATCCGGATCCACTAGTTCTAGCGTTTAACTTAAGCTTGCCACCATGAAGCTACT  
GTCTTCTATCGAACAAGCATGCGATATTTGCCGACTTAAAAAGCTCAAGTGCTCCAA  
AGAAAAACCGAAGTGCGCCAAGTGTCTGAAGAACAACCTGGGAGTGTCGCTACTCTC  
CCAAAACCAAAAGGTCTCCGCTGACTAGGGCACATCTGACAGAAGTGGAATCAAGG  
CTAGAAAGACTGGAACAGCTATTTCTACTGATTTTTCCTCGAGAAGACCTTGACATG  
ATTTTGAAAATGGATTCTTTACAGGATATAAAAGCATTGTTAACAGGATTATTTGTA  
CAAGATAATGTGAATAAAGATGCCGTCACAGATAGATTGGCTTCAGTGAGACTGA  
TATGCCTCTAACATTGAGACAGCATAGAATAAGTGCGACATCATCATCGGAAGAGA

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Fig. 28b (con't)

G TAGTAACAAAGGTCAAAGACAGTTGACTGTATCGCCGGGTACCTTTGTGGTGCTTA  
AAAAATGAGCATGTGGTGCCTCCTATGGTCCAGGTTAATACCAGACTTTGATAAAGT  
TCTATGGTAGAACATGTTTCCCTGGCACCTGTCCCTGCCTGACAGACTCAAGCT  
CTTCTTTTGTTCCTTTATTTTATTTATTTATTTTAAAGATGGATTCTCATTCTGTGCGCC  
AGGCTGGAGTTCAGTGACATGATATTGGCTCACTGCATCCCAGGTTTCAAGCGATTCT  
TCCTGCCTCAGGCTCACAAGTAGCTGGGGTTACAGGTGCCTGCCAGGACGCCAACT  
AAATTTTGTATTTTATAGTAGAGACAGGGTTTCATGATGGTGGCAAGGCTGGTCTCAA  
ATTCCTGACCTCAAGTGATCTGCTTGCCTCAGCCTCCCAAAGTCTGGGATTACAGGC  
ATGGGCCACTGCACCAGGCCTTCTTTTGTTTTTATCACCTCCCCCATCTCCAGGGGC  
ATCATGTTATTTTTCTGCCTGTGGAGTTTCACTGGGCAAGCTCCTCTTCAAAGAATCA  
GTCAGTGGAGCTTTCCCCAACTTTTACAGCTGCTGTCTGACCACAGGTAATCTAAGA  
AACTGCTTTAGATTAATGAAGTGGGACAATGTAATGGCAATTTCTAAGTGATGTTTC  
TG TAGATTAAGAGGGGGCCTTATTAATTAATACCATGAAACAAAAAAATGACTA  
AAATAGGAATTCCAGGGACAATTTAAAGGGTGCTGGGGGCCAGGTGATTATTTTTTA  
GACAGAAGAGTCATTCCAGGTCTCTTACAACCTACTTGCTAGGCCTTGCCTTACTTG  
GTCTACACTTAGATTAACCTCGTTATGAGCCGCTAATAATGTGCTCAACTTGTGATT  
TCATGAACAGAATGTATTTTACCTTATTAATATTTTGGATGAAATTTTCCATTTTGA  
TCAACATAAGAAGTGATGTCATTTTTTTTATTTTTAATTTCTTTTTTTTTTGAGAC  
AGAGTCTCACTCTGTTGCTCAGGCTGGAGTATAGTGGTGGGATCTCGGCTCACTGCA  
GCCTCTGCCGCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTGAGTAGCTGGGA  
TTACAGGCACCTGCCACCAAGCAGGACTAATTTTTGTGTTTTTAGTAGAAACGGGGT  
TTCACCATCTTGGCTAGGCTGGTCTTGAACCTCCTGACCTCGTGATCCATCTGCCTCAG  
TAAGCCACCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACTGCGC  
CCAGCCGTATCTGTCAATTTTAACAATAAAATCCTTAACCCTGCATTCTCGGAAGAAA  
TGAGCACATTAACCATATTTTTCTTATACACTTGATCAATTTGTTATCAATTTAAAAA  
ATCTGATATCAGGATTTTATAGAACGCAAACTCCTCCTGCATGGTTGGAGATGGCGA  
AGTCAGTTGCCCAGACTTGTTAAGTTCAGGATGCAGCCTGTGAAAGGAGAGGCAAT  
CCTACCTGGAAGTACCTTTGCCCACTTCACGACTTGATCATCTGTTTGCCTGCTAAG  
CGGTTGAGCGTGGAGAGCAGATTTTCGGCTGTATCTGGTTTTGAGCTGTCATAGCCT  
GCATATACAATTTCAAGTTCAATGTTTTCAAGGACCATAACGGGGGAAGGTGTGAGC  
GCTCGTGAGATTGTGGAGAGCTGAGGAACCAGTGCTGTGTTGACCGAGGGTTCTTTT  
GCAGGAGCGATGTACGTTGTCCCTTCTCTGGGCTTTGCGGGGGTGGGGGTGGGGGT  
GGGGGCTGCTGCTGCTGTGGCTGCTCCTCGTGAATCCCTTTCTTTTCATCTTTTGCAT  
TACTTTTCTTGCTTTCATCACCAACCTATTTCTCATCTGCCTCCTCCCCTACTGAAACC  
CCTGTTTTCTTATTGCCAGAGAGGCCATCTGTCAGAATATGGCTGTAGTTACTATC  
ATAATTCAAATATTCCCTTTTAAGTATTTCTTGACCCAACAATTACAAAGAAGCACT  
GCTAGATACAAACATAAATAAAATGTGCTAATGAGGAATGCAAACAGTATTAAAT  
GTAAACTTAAATAGGAAGGAATTTGTGGCCAAAGAAAACTGATTACGATTCTTTC  
AGTCTTTTAAATGCATCATAAACTAAAAATGTTTTGCTACAGAATAACAGTTTGG  
CTTCTTTTATGATGGCAAAGAAGGGTAATTACGATTGTCATGAAAACACATTGAGCA  
GCTGTATACTGTTAACAAAAGAACCATTATATGAGCTCGTAAAAGCTGGCACTTTAT  
ATATTCACATTTCTAGAAATTAGATTGTCTTCCCAATTGGAGTCGATACCAAAAAGA  
GACTGTTTTCTATTAATTGTGGCTTTGTACCAGTCAATTTTCAGAGCCAACTGGATCA  
TCTTTCTTTTGGGATATATCCACATATTATTATGTGGAATTTATATATACTGATTTAT  
ATACACTCAGAAGCATAACAGTATAATGTTGCAAAGAGTAATTTTTTAAGTTCCAGCA  
GATCTGTAAATTTTTAACGTTAAAAAATGCCAGTTTCAGTAGATTCTTTCACCAACGT

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Fig. 28c (con't)

ACATCTGTTT TAGAAATTACTGAAAGAAATCATAACGCATAACTCTGCAGTTTATTTT  
ATGAAGGCTAATTAATAGGTACTTACTCATTAAAGACTAGGTCTGGTGCAAAATAGA  
GAAATTGGCTGTTTCGTATGTTTGTACGATCTCCAGCTCAAGGCAAATGATGATAGAC  
ACATCCAAGAATACTGGATTAGGGTAATTTGGTCCTCAAGAGGCAAGTTTTTAAATC  
CTGAAGAACAAAACAATTAATCACAGAAATACACTTAGCATTTAAGTACATTCCAG  
GAAGATGCTTCTTAAGTCAACCCCAAACAGCCACCTTTCTTTCACTTTTCTCTTTTCT  
GACAGACTCAAATCAATTCAACAGTCATTTACAGAGTGCCCACTGGCCAGTCC  
TGTTCCACATTTCACTTTAAATTCATCCTAAATTCTAGATGAGGGTAAACTGCCAGG  
GCAAATAAAATTGCAAAGTTCAGCAAGTTTCAGTGTGGATGACAGCCTAAAACCC  
TTGGTTAGATTGAGAGAATTTGTATTAACCTGTAAAACCTTGCTTCGTCCCACCCACA  
ATTAATAACACTAAAATAAAGGGTAATTTAATAACTGTCAAACCCTGTGTATCTGCA  
ATAATGGTGGGAGATTTTCATTGTTTCATGAGGCGGCCGCTTGATCTGATCTGAGTCAC  
TGAATGGGATACTGTCCGCAAGGGCGGGGGCTATTCTTGTCATCTGGGCCTACGGA  
ACCAGCACCCATCGCCAAACTCTTCATCCTCTTCCTCAATCTCGCTTTCTCTCTCGCT  
CGCTTTTTTTCTCTTCTCCTTTTTTTTTTTTTTTTTTTTTTTTTTCCCCGCAAAAGGAGGG  
GAGAGGGGGTAAAAAAATGCTGCACTGTGCGGCAAGGCCGGTGAATAAACGACTCG  
AATCCAATCACCCCCCGCGTTCCTAAAGTTGCCTTTTATGGCTCGAGTGGCCGCTG  
TGGCTTCCTATAAAACCCGCGCGCAACCCCCAGCCACTGTCAAATCAAGCTAAC  
GCCACCATGGTGAGCAAGGGCGAGGAGCTGTTACCGGGGTGGTGCCCATCCTGGT  
CGAGCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGTCCGGCGAGGGCGAGG  
GCGATGCCACCTACGGCAAGCTGACCCTGAAGTTCATCTGCACCACCGGCAAGCTG  
CCCGTGCCCTGGCCCACCCTCGTGACCACCTTCGGCTACGGCCTGCAGTGCTTCGCC  
CGCTACCCCGACCACATGAAGCAGCACGACTTCTTCAAGTCCGCCATGCCCGAAGG  
CTACGTCCAGGAGCGCACCATCTTCTTCAAGGACGACGGCAACTACAAGACCCGCG  
CCGAGGTGAAGTTCGAGGGCGACACCCTGGTGAACCGCATCGAGCTGAAGGGCATC  
GACTTCAAGGAGGACGGCAACATCCTGGGGCACAAGCTGGAGTACAACACTACAACAG  
CCACAACGTCTATATCATGGCCGACAAGCAGAAGAACGGCATCAAGGTGAACCTTCA  
AGATCCGCCACAACATCGAGGACGGCAGCGTGCAGCTCGCCGACCACTACCAGCAG  
AACACCCCCATCGGCGACGGCCCCGTGCTGCTGCCCCGACAACCACTACCTGAGCTAC  
CAGTCCGCCCTGAGCAAAGACCCCAACGAGAAGCGCGATCACATGGTCTCTGCTGGA  
GTTCTGTGACCGCCGCGGGATCACTCTCGGCATGGACGAGCTGTACAAGAACTTGTT  
TATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAA  
AGCATTTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTAT  
CATGTCGTGGCCTGCATGGCCCCGGCCGCACCGCGGTGGAGCTCCAATTCGCCCTATA  
GTGAGTCGTATTACGCGCGCTCACTGGCCGTCGTTTTTACAACGTCGTGACTGGGAAA  
ACCCTGGCGTTACCCAACCTAATCGCCTTGCAAGCACATCCCCCTTTCGCCAGCTGGC  
GTAATAGCGAAGAGGCCCCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAAT  
GGCGAATGGGACGCGCCCTGTAGCGGCGCATTAAAGCGCGGCGGGTGTGGTGGTTAC  
GCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCCGCTCCTTTCGCTTTCTTC  
CCTTCCTTTCTCGCCACGTTTCGCCGGCTTTCCCCGTCAAGCTCTAAATCGGGGGCTCC  
CTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCCAAAAACTTGATTAGG  
GTGATGGTTACGTAGTGGGCCATCGCCCTGATAGACGGTTTTTTCGCCCTTTGACGTT  
GGAGTCCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACAACACTCAACCC  
TATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGCCGATTTTCGGCCTATTGGTTA  
AAAAATGAGCTGATTTAACAAAAATTTAACGCGAATTTTAACAAAAATATTAACGCTT  
ACAATTTAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATTTTT

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Fig. 28d (con't)

CTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCA  
ATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTCGCCCTTATTCC  
CTTTTTTGCGGCATTTCCTTCCCTGTTTTTGTCTACCCAGAAACGCTGGTGAAAGTA  
AAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGGTACATCGAACTGGATCTCAA  
CAGCGGTAAGATCCTTGAGAGTTTTTCGCCCCGAAGAACGTTTTCCAATGATGAGCAC  
TTTTAAAGTTCTGCTATGTGGCGCGGTATTATCCCGTATTGACGCCGGGCAAGAGCA  
ACTCGGTGCGCCGATACACTATTCTCAGAATGACTTGTTGAGTACTACCAGTCAC  
AGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGCTGCCATAA  
CCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAACGATCGGAGGACCGAAG  
GAGCTAACCGCTTTTTTGCACAACATGGGGGATCATGTAACCTCGCCTTGATCGTTGG  
GAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCACGATGCCTGT  
AGCAATGGCAACAACGTTGCGCAAACCTATTAACCTGGCGAACTACTTACTCTAGCTTC  
CCGGCAACAATTAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTTCTGC  
GCTCGGCCCTTCCGGCTGGCTGGTTTATTGCTGATAAATCTGGAGCCGGTGAGCGTG  
GGTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGTAG  
TTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCT  
GAGATAGGTGCCTCACTGATTAAGCATTGGTAACCTGTCAGACCAAGTTTACTCATAT  
ATACTTTAGATTGATTTAAACTTCATTTTTAATTTAAAGGATCTAGGTGAAGATCC  
TTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTC  
AGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAAT  
CTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTGGCCGGATCA  
AGAGCTACCAACTCTTTTTCCGAAGGTAACCTGGCTTCAGCAGAGCGCAGATACCAA  
TACTGTCCTTCTAGTGATAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACC  
GCCTACATACCTCGCTCTGCTAATCCTGTTACCAAGTGGCTGCTGCCAGTGGCGATAA  
GTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTC  
GGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCG  
AACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGA  
AAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGG  
AGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTTCGCCACCTCT  
GACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAAC  
GCCAGCAACGCGGCCTTTTTACGGTTCCCTGGCCTTTTGCTGGCCTTTTGCTCACATGT  
TCTTTCCTGCGTTATCCCTGATTCTGTGGATAACCGTATTACCGCCTTTGAGTGAGC  
TGATACCGCTCGCCGCAGCCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAG  
CGGAAGAGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCCGATTCATTAAT  
GCAGCTGGCACGACAGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATT  
AATGTGAGTTAGCTCACTCATTAGGCACCCAGGCTTTACACTTTATGCTTCCGGCTC  
GTATGTTGTGTGGAATTGTGAGCGGATAACAATTTACACAGGAAACAGCTATGACC  
ATGATTACGCCAAGCGCGCAATTAACCCTCACTAAAGGGAACAAAAGCTGGGTACC  
GGGCCCCCCTCGAGGTGACGGTATCGATAAGCTTCCAGTGGATCAGANAAACAA  
TGATCCACGAGAGATCTATAGATCTATAGATCATGAGTGGAGGAATGAGCTGGCC  
CTTAATTTGGTTTTGCTTGTTTAAATTATGATATCCAACCTATGAAACATTATCATAAA  
GCAATAGTAAAGAGCCTTCAGTAAAGAGCAGGCATTTATCTAATCCCACCCCCACCC  
CCACCCCCGTAGCTCCAATCCTTCCATTCAAAATGTAGGTACTCTGTTCTCACCCCTC  
TTAACAAAGTATGACAGTAAAAAACTTCCATTTTAGTGACATCTTTATTGTTTAAAT  
AGATCATCAATTTATGCAGACTTACAGCTGGGATTTTCATCAGATTGCCATGCTGAGT  
CAAGAACAGTGAGTGACGAAGCTAACCAGAGGCTACATACGTCAGAGAGAGAGCTC

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 28e (con't)

AGCCTTTACAGCTCACTTCCTTTCTCAGGCATTTCCTTTGCCCTCGGACGAGTGCTGGG  
GCGTCGGTTTCCACTATCGGCGAGTACTTCTACACAGCCATCGGTCCAGACGGCCGC  
GCTTCTGCGGGCGATTTGTGTACGCCCCGACAGTCCCGGCTCCGG

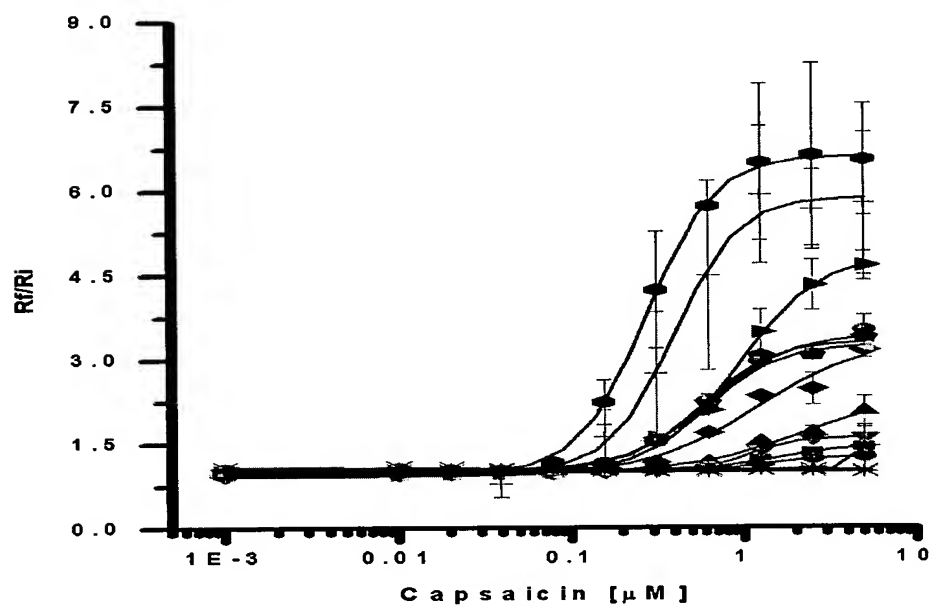


Figure 29

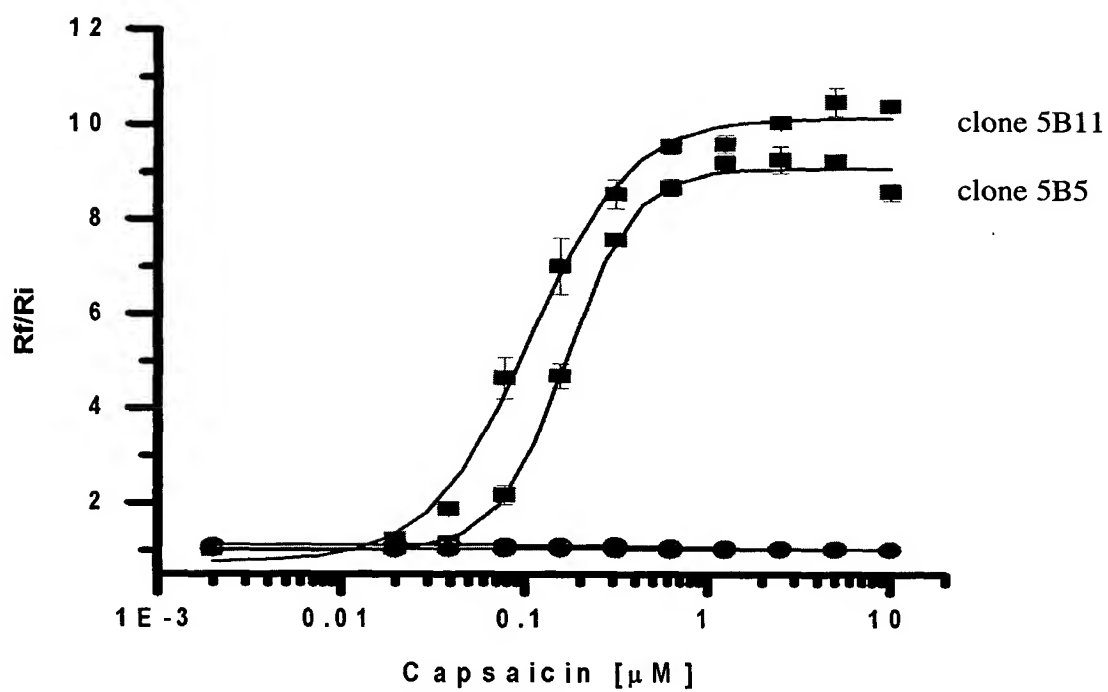


Figure 30

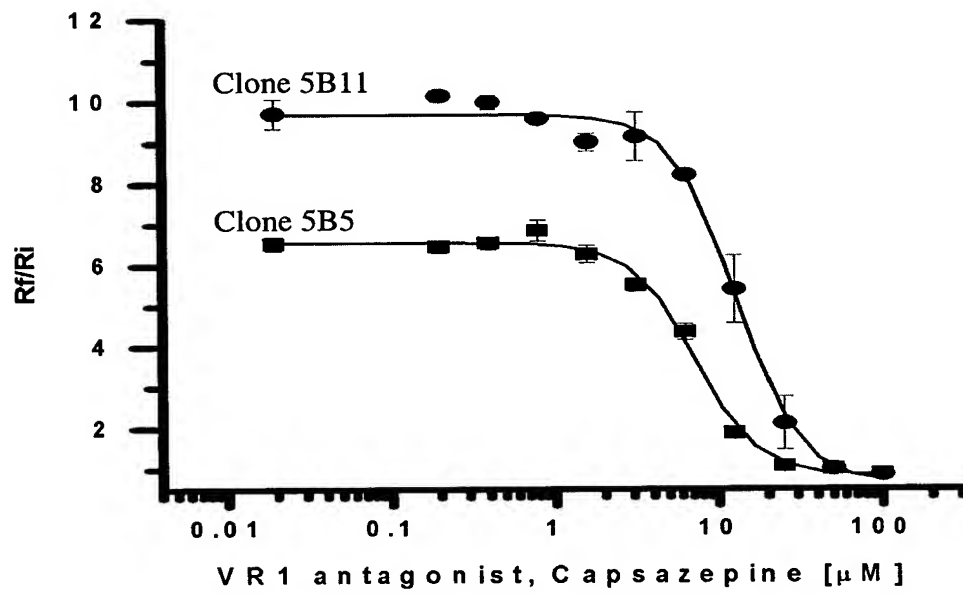


Figure 31

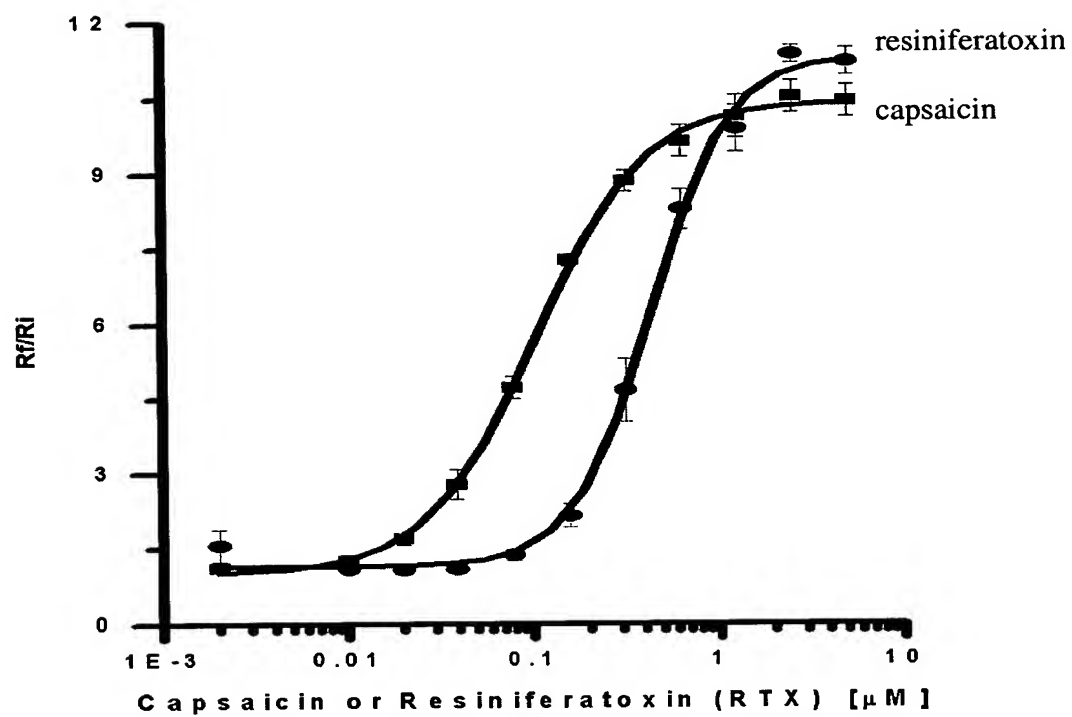


Figure 32

**Vanilloid Region of Homology (SEQ ID NO:86)**

TTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGGGCGC  
CCGACACCACGCCCCGGCTAATTTTTTGTATTTTTTTTAGTAGAGATGGGATT  
TCACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCCACC  
TGCTTTGGCCTCCCAAAGTGCTGGGATTACAGGGCGTGAGCCACGCGCCCA  
GGCCAGTACAGCTTCTTCATAAGGAGATGGACCAGGAAAGGTCCCTGCCC  
AGGAGGAGGTACAGGGTGCGGGAGAGATAAATCAGTGACAGATAGCAA  
TTGCTGGACCACATGGTAGGCTGTGTGGGACAGGCGGTCACTGGGCTGGG  
CCACTGTGTGGAGGACAGCGGGGAGCATGAGCAGGGCAGGGATCTGGGG  
GCTTCATGGAGGAGGCGGCATCAGTGCTGGATCCTGAGGGGAAGTAGCAT  
CTGAGTGGTGATAGGACTTGTGCAAGGGTAGACAGAGGAAAAAGCCCTTA  
GGTGGAGACCCGATGGGAATAGAGGCTATGGGAGGGATGTATGGGCCAC  
CCCTGGGTGCCAGGGAGTGGGGATGCCAGCCAGAGGGAGGGGAAGCAT  
GGGGATGGGGCAGGATGGGAGTGGAAAATAGCATCAGCTCATGTGTCCA  
ACTACACATGCTGCTGCCAGCGGCCAGCTGATCTCTAGGTGTTTAGGCCTA  
GAAGACCAACCAGCTCCAAATCACTTAAAGCCTAAACGTTCCCTGTCTCT  
ACTAAAAATACAAACATTAGCCACGCATGGTGGCGGGCGCCTGTAATCCC  
AGCTACTTGGGAGGCTGAGGGAGGAGAATCGCTTGAACCTGGGAGGTGG  
AGGTTGCAGTGAACAGAGATTGCCCCATTGCACTCTAGTCTGGGCGACAG  
AGTGAGACACACACACACACACACACACACACGCCTAAACATTCAAG  
GCCAGGATGCTTGACAGATGTTGATTTCATAAAAAATGACAAAAAGCACAAA  
ATCCAAAATCTCGTATAAGCTCAGTGGCTGTGGCAGCGAGGTTGAAGAGC  
AAAGGCAGGCCGGGCACCTGGCTGATGATGTGTGGACCCGTTGCACAGCA  
GGGCCCCGCAGTGCGGTGTGGGTGTGGGTGGGCCAGTCTCTGCCGCTCAC  
CCTATTCCAGGGACACAGTCTGCTTGGCTCTTCTGGACTGAGCCATCCTCA  
TCACCGAGATCCTCCCTGAATTCAGCCCACGACAGCCACCCCGGCCGTTTT  
CCTTGTTCTGTGTGGGGAGGGAGGCAGCGCGGTGGTTATCAACCTCACCC  
TGCAGAGGAGGCACCTGAGGCCCGGGGCCTGTCCACCCTCCCAGGCCG  
ACGTCAGTGGCCGCAGGACTGCCTGGGCCCTGCTAGGCCTGCTCACCTCT  
GAGGCCCTCTGGGGTGAGAGGTTCACTCCTGGAAACACTTCAGTTCTAGGG  
GGCTGGGGGCAGCAGCAAGTTGGAGTTTTTGGGGTACCCTGCTTCACAGGG  
CCCTTGGAAGCGGCCGCTCAGATCTAGAGAGCCACACCCCATGTTGTCT  
CACTTGCAATTGGGGAGAGAAGGGATCCTTCCCCAGAGGGTAGGCAGTAT  
CTGTTCTGGCTTTGGAGTTGAGAAAGACTCAGATCATACCACGTCTCTGTG  
GGCAGAATCGATTCTTTTAGGATTGTCCTTTAGTCCAGATTGATGAGTTTG  
TGAGTCTTGTGTAAACCAGAATCACCATCTCCATCACACAGCCAACACTC  
GTTTGCCTAAATCACGGTAGAAGTTCCCCTGATCACTGTAGAATGTTTTGC  
GGTGACAGGTGCATCACACGGGCTTAGGTGCAGGGTAACTCCAGGCCT  
GGCAGTGGAGGGCTGTCCTGACCCTGTTCCCCGGCCCAGCCCAGGGCACA  
TGACCCCTCAGTTCCTGTCCCACCCCGTTCCCTGGAAGAAGCTTGTTTCC  
AGTAGGGAATCAGGTGCAGAGTGTGCAGTATAGATTACAGCGTTTGTGAC  
TGACTGAATGATAGCACAAATCCAGGCTGCTTCCTGTTGGCTGGGTTTGGTT  
GGACTGGGACCCGTCAGAGGAAAAGGCAACGCCGCTGACAAAGAACATT  
GCCGAAAGGTTTCATGGGAGGCTCCGGCTAACAGGTGCTCTCTTGCTGGGC  
TGCCTAACGAGCAGCCCCTATTCTTATTCTTAGCTTATTCTTGAGACCAT  
AGACATCCCTGGGACAGCCAGGCATGGGTATGACCTGGGTCTTATTCACA  
CTGCATTTTGGGGTTCCTGAGCTGCTTGTGTTGAGCGAGAGGTGCTTCAGGT  
TCAGGTCTTATGCCTAGCCCCCTTGGGTGAGAGGGCCTATTCTGATTGGCCC

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Fig. 33b (con't)

CCAGGCCCTGCTGTGGAGTCTGGGTCTGAGTTGAACTGCTGAGAAAGAGC  
CCCAGACCTCCAGCATCGTGGTGGAGCACTGGAGATGCTCTGGAGCCAGC  
CTGCCTGGGGTCAAGTCCGGGTTCATCTCTGACTGTGTGACCTCGGGGAC  
GTGCCATAACTGCTCTGTGCCTCGGTCTCCTCATCGGTGAAGTATTTCCCT  
CTTAGGGATGTTGTGGGAATGAAGTGGGTGAAGGAATGCGAGTCCTGAGA  
ACCGTGTCTGCTTTGTGCACGTGCTCAGACGCATCAACGATTCTGCTTCTC  
ATTGCTTCTGGTGCCTTTTAAGTGCTGCCAGGGCTGTCCGCACTGTGAAC  
GGTCCTTGACGGGGTGTTATCTTCAGAAAGGGAAGACTAGCACCCGGCCC  
CCCAGGCTTCCAAAGCATCATCCATGCAACCATGTTGGCTTTCAATTCCCT  
GGAGTTAAGGCTGACGGCCATCTGGTTCTAACC CGCCTCCTGTCTTCTG  
TCCCCTGACTTCCCCTTCTTCAGCTGCTCTAGGCTTCCCTGTCTGTCTCCA  
GACCCTAGCCACCTCTGTTCCCTTCCCAGGCTCAGCTCATCCATCACCAA  
CTGCCATGGACCCCTCTTCAGCACCTGCCCCCTCCTGCAGTCCCTCCGCC  
CAGCCAGTACCTGGTTTCTGTCTCAGCGGGGAGCTGACTCCTCTCTGTGCC  
CCCAGCGCAGGGCTGGACTCTGAGGAGGAGGACTCAGTAGATAGGTATTG  
AGTGATGAGATGAGGGAATCGGCTTTCTGTGGCCGGGAACACTCCTGCTG  
CAGGGGGTCCACCTGATGGGTGAGTCAGAGAAAGACTCAGGCCTGTTGAA  
AGTGGATCAACAGGCAGGCAGGGAGATGGCCAGTAGCCAGCCGTCCGTC  
CTGTTACAGCCTGCGGAGTGGTGAGGCTGCCTCTGTGTTTTTCATGGATCT  
GAGATTCAGAACGTAGCTGGTTTACAGCCATGGCCCAGTTGTGTGCTCTG  
GAGTTTCACTGCCTGAATTTTAACTTGAAAATGTAGGACTTGGGAGTCTCT  
CTGAGCCATTCTGGCTTGGGAGATTGCCTGATTATATATTTCAAAAAAAAAA  
AAAAAAGAAAATGCAGGACTTGAGAAGCCTCTCATTTCTTCTGCGGCTGT  
TTTCCGGAATGTAGCCACTGCTGGAACAGTAATCTCCCTAACTTCCTATGG  
AAATGGCAATTAGAAGGGTCTGATTGCTCTTATTTCCCATGTGTGCAGCT  
GCTGCTGCTGCTGCTGCTGCTGCTTCTTTTTTTTTTTTTTTTTTTTTTTGA  
GACAGAGTTTCACTCTGTTGCCAGGCTGGAGTGCAGTGGCACAGTCTCA  
GCTCACTGTAACCTCTACATCCTGGG

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 34

EYPFP (SEQ ID NO:84)

CTTGTACAGCTCGTCCATGCCGAGAGTGATCCCGGCGGCGGTACGAACT  
CCAGCAGGACCATGTGATCGCGCTTCTCGTTGGGGTCTTTGCTCAGGGCGG  
ACTGGTAGCTCAGGTAGTGGTTGTCGGGCAGCAGCACGGGGCCGTCGCCG  
ATGGGGGTGTTCTGCTGGTAGTGGTCGGCGAGCTGCACGCTGCCGTCCTC  
GATGTTGTGGCGGATCTTGAAGTTCACCTTGATGCCGTTCTTCTGCTTGTC  
GGCCATGATATAGACGTTGTGGCTGTTGTAGTTGTACTCCAGCTTGTGCCC  
CAGGATGTTGCCGTCCTCCTTGAAGTCGATGCCCTTCAGCTCGATGCGGTT  
CACCAGGGTGTCGCCCTCGAACTTCACCTCGGCGCGGGTCTTGTAGTTGCC  
GTCGTCCTTGAAGAAGATGGTGCGCTCCTGGACGTAGCCTTCGGGCATGG  
CGGACTTGAAGAAGTCGTGCTGCTTCATGTGGTTCGGGGTAGCGGGCGAAG  
CACTGCAGGCCGTAGCCGAAGGTGGTCACGAGGGTGGGGCCAGGGCACGG  
GCAGCTTGCCGGTGGTGCAGATGAACTTCAGGGTCAGCTTGCCGTAGGTG  
GCATCGCCCTCGCCCTCGCCGGACACGCTGAACTTGTGGCCGTTTACGTCG  
CCGTCCAGCTCGACCAGGATGGGCACCAACCCCGGTGAACAGCTCCTCGCC  
CTTGCTCACCATGGTGGCGACCGGTGGATCCTTCTAGAGTCGACGATCGA  
AGTTAGCTTGATTTGACAGTGGCTGGGGGTTCGCGCCGCCGGGTTTTATAGG  
AAGCCACAGCGGCCACTCGAGCCATAAAAGGCAACTTTAGGAACGGCGG  
GGGGTGATTGGATTCGAGTCGTTTATTCACCGGCCTTGCCGCACAGTGCAG  
CATTTTTTTACCCCTCTCCCTCCTTTTGCGGGGGAAAAAAAAAAAAAAAA  
AAAAAAAAAAGGAGAAGAGAAAAAAAAAGCGAGCGAGAGAGAAAGCGAGAT  
TGAGGAAGAGGATGAAGAGTTTGGCGATGGGTGCTGGTTCCGTAGGCCCA  
GATGGACAAGAATAGCCCCCGCCCTTGCGGACAGTATCCCATTCAGTGAC  
TCAGATCAGATCAAGC

**pKI-CMV-SD (SEQ ID NO:82)**

TCCCTTTAGTGAGGGTTAATTGCGCGCTTGGCGTAATCATGGTCATAGCTG  
TTTCCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCC  
GGAAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCAC  
ATTAATTGCGTTGCGCTCACTGCCCCGCTTTCCAGTCGGGAAACCTGTCGTG  
CCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTTCGCTA  
TTGGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCTGTTT  
GGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAAATACGGTTATCC  
ACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGC  
AAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGG  
CTCCGCCCCCTGACGAGCATCAAAAAATCGACGCTCAAGTCAGAGGTG  
GCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCT  
CCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCG  
CCTTTCTCCCTTCGGGAAGCGTGGCGCTTTTCTCATAGCTCACGCTGTAGGT  
ATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAAC  
CCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGT  
CCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAAC  
AGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTG  
GTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCT  
GCTGAAGCCAGTTACCTTCGGA AAAAGAGTTGGTAGCTCTTGATCCGGCA  
AACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGTTTGCAAGCAGCAGATTA  
CGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGG  
TCTGACGCTCAGTGGAACGAAAACCTCACGTAAAGGGATTTTGGTCATGAG  
ATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTA AAAATGAAGTTT  
TAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAAT  
GCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCA  
TAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTA  
CCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGC  
TCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGA  
AGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGG  
GAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTTCGCAACGTTGTTGC  
CATTGCTACAGGCATCGTGGTGTACGCTCGTCGTTTGGTATGGCTTCATT  
CAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTG  
CAAAAAGCGGTTAGCTCCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTT  
GGCCGCAGTGTTATCACTCATGTTATGGCAGCACTGCATAATTCTCTTAC  
TGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAA  
GTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTC  
AATACGGGATAAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCA  
TTGGA AAAACGTTCTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTG  
AGATCCAGTTCGATGTAACCCACTCGTGCAACCCAACTGATCTTCAGCATCT  
TTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGC  
CGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT  
TCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCG  
GATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGC  
ACATTTCCCCGAAAAGTGCCACCTAAATTGTAAGCGTTAATATTTTGTTAA  
AATTCGCGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCG  
AAATCGGCAAAATCCCTTATAAATCAAAAAGAAATAGACCGAGATAGGGTTG  
AGTGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTC  
CAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTG

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 35b (con't)

AACCATCACCCCTAATCAAGTTTTTTGGGGTTCGAGGTGCCGTAAAGCACTA  
AATCGGAACCCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGAAAGCC  
GGCGAACGTGGCGAGAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGC  
TAGGGCGCTGGCAAGTGTAGCGGTACGCTGCGCGTAACCACCACACCCG  
CCGCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTCGCCATTACAGGCTGC  
GCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAG  
CTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAAACGCCAG  
GGTTTTCCAGTCACGACGTTGTAAAACGACGGCCAGTGAGCGCGCGTAA  
TACGACTCACTATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGGCCGCTC  
TAGAACTAGTGGATCCCCCGGGACCGGTCCCCCACTCACCTGCCAGTAA  
GCAGTGGGTTCTCTAGTTAGCCAGAGAGCTCTGCTTATATAGACCTCCAC  
CGTACACGCCTACCGCCCATTGCGTCAATGGGGCGGAGTTGTTACGACA  
TTTTGGAAAGTCCCGTTGATTTTGGTGCCAAAACAACTCCCATTGACGTC  
AATGGGGTGGAGACTTGGAAATCCCCGTGAGTCAAACCGCTATCCACGCC  
CATTGATGTACTGCCAAAACCGCATCACCATGGTAATAGCGATGACTAAT  
ACGTAGATGTACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTACTGGGC  
ATAATGCCAGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTAC  
TTGGCATATGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAAT  
AGTCCACCCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGA  
ACATACGTCAATTATTGACGTCAATGGGCGGGGGTCGTTGGGCGGTACGCC  
AGGCGGGCCATTTACCGTAAGTTATGTAACGCGGAACCTCCATATATGGGC  
TATGAACATAATGACCCCGTAATTGATTACTATTAATAACTAGTCAATAATC  
AATGTCAACGCCCGGGCTGCAGGAATTCTACCGGGTAGGGGAGGCGCTTT  
TCCCAAGGCAGTCTGGAGCATGCGCTTTAGCAGCCCCGCTGGCACTTGGC  
GCATCACAAGTGGCCTCTGGCCTCGCACACATTCCACATCCACCGGTAGC  
GCCAACCGGCTCCCTTCTTTGGTGGCCCCCTTCGCGCCACCTTCTACTCCTCC  
CCTAGTCAGGAAGTTCCCCCCCCGCCCCGCAGCTCGCGTCGTGCAGGACGT  
GACAAATGGAAGTAGCACGTCTCACTAGTCTCGTGCAGATGGACAAGCAC  
CGCTGAGCAATGGAAGCGGGTAGGCCTTTGGGGCAGCGGCCAATAGCAG  
CTTGGCTCCTTCGCTTTCTGGGCTCAGAGGCTGGGAAGGGGTGGGTCCGG  
GGGCGGGCTCAGGGGCGGGCTCAGGGGCGGGGCGGGCGCGAAGGTCCTC  
CGGACCCGGCATTCTGCACGCTTCAAAGCGCACGTCTGCCGCGCTGTTCT  
CCTCTTCTCATCTCCGGGCCTTCGACCTGCATGAAAAAGCCTGAACTCAC  
CGCGACGTCTGTGAGAAAGTTTCTGATCGAAAAGTTTCGACAGCGTCTCCG  
ACCTGATGCAGCTCTCGGAGGGCGAAGAATCTCGTGCTTTCAGCTTCGAT  
GTAGGAGGGCGTGGATATGTCTGCGGGTAAATAGCTGCGCCGATGGTTT  
CTACAAAGATCGTTATGTTTATCGGCACTTTGCATCGGCCGCGCTCCCGAT  
TCCGGAAGTGCTTGACATTGGGGAATTCAGCGAGAGCCTGACCTATTGCA  
TCTCCCGCCGTGCACAGGGTGTACGTTGCAAGACCTGCCTGAAACCGAA  
CTGCCCGCTGTTCTGCAGCCGGTCGCGGAGGCCATGGATGCGATCGCTGC  
GGCCGATCTTAGCCAGACGAGCGGGTTCGGCCCATTCGGACCGCAAGGAA  
TCGGTCAATACACTACATGGCGTGATTTTCATATGCGCGATTGCTGATCCCC  
ATGTGTATCACTGGCAAACGTGTGATGGACGACACCGTCAGTGCGTCCGTC  
GCGCAGGCTCTCGATGAGCTGATGCTTTGGGCCGAGGACTGCCCCGAAGT  
CCGGCACCTCGTGACGCGGATTTCCGGCTCCAACAATGTCCTGACGGACA  
ATGGCCGCATAACAGCGGTCAATTGACTGGAGCGAGGCGATGTTTCGGGGAT  
TCCCAATACGAGGTCGCCAACATCTTCTTCTGGAGGCCGTGGTTGGCTTGT  
ATGGAGCAGCAGACGCGCTACTTCGAGCGGAGGCATCCGGAGCTTGCAGG  
ATCGCCGCGGCTCCGGGCGTATATGCTCCGCATTGGTCTTGACCAACTCTA  
TCAGAGCTTGGTTGACGGCAATTTTCGATGATGCAGCTTGGGCGCAGGGTC

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

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Fig. 35c (con't)

GATGCGACGCAATCGTCCGATCCGGAGCCGGGACTGTCGGGCGTACACAA  
ATCGCCCGCAGAAGCGCGGCCGTCTGGACCGATGGCTGTGTAGAAGTACT  
CGCCGATAGTGGAACCGACGCCCCAGCACTCGTCCGAGGGCAAAGGAA  
TGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTT  
GTTTGCCCCTCCCCCGTGCCTTCCCATTGTCTGAGTAGGTGTCATTCTATTC  
TGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGATTGGGAAGACAA  
TAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGGCTTCTGAGGCGGAAA  
GAACCAGCTGGGGGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGG  
GGCCCGGTACCCAGCTTTTGT

**pKI-CMV-SD-Vanilloid (SEQ ID NO:83)**

CGATCGCTGCGGCCGATCTTAGCCAGACGAGCGGGTTCGGCCCATTCGGA  
CCGCAAGGAATCGGTCAATACACTACATGGCGTGATTTTCATATGCGCGAT  
TGCTGATCCCCATGTGTATCACTGGCAAACGTGTGATGGACGACACCGTCA  
GTGCGTCCGTGCGCGCAGGCTCTCGATGAGCTGATGCTTTGGGCCGAGGAC  
TGCCCCGAAGTCCGGCACCTCGTGCACGCGGATTTTCGGCTCCAACAATGT  
CCTGACGGACAATGGCCGCATAACAGCGGTCATTGACTGGAGCGAGGCGA  
TGTTTCGGGGATTCCCAATACGAGGTCGCCAACATCTTCTTCTGGAGGCCGT  
GGTTGGCTTGTATGGAGCAGCAGACGCGCTACTTCGAGCGGAGGCATCCG  
GAGCTTGCAGGATCGCCGCGGCTCCGGGCGTATATGCTCCGCATTGGTCTT  
GACCAACTCTATCAGAGCTTGGTTGACGGCAATTTTCGATGATGCAGCTTG  
GGCGCAGGGTCGATGCGACGCAATCGTCCGATCCGGAGCCGGGACTGTGCG  
GGCGTACACAAATCGCCCGCAGAAGCGCGGGCGTCTGGACCGATGGCTGT  
GTAGAAGTACTCGCCGATAGTGGAACCGACGCCCCAGCACTCGTCCGAG  
GGCAAAGGAATGAGCTCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCC  
AGCCATCTGTTGTTTGGCCCTCCCCCGTGCCCTTCCCATTGTCTGAGTAGGT  
GTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGACAGCAAGGGGGAGGA  
TTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGGCTT  
CTGAGGCGGAAAGAACCAGCTGGGGGATATCAAGCTTATCGATACCGTCG  
ACCTCGAGGGGGGGGCCCGGTACCCAGCTTTTGTTCCTTTAGTGAGGGTTA  
ATTGCGCGCTTGGCGTAATCATGGTCATAGCTGTTTCCTGTGTGAAATTGT  
TATCCGCTCACAAATCCACACAACATACGAGCCGGAAGCATAAAGTGTA  
AGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTC  
ACTGCCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAAT  
CGGCCAACGCGCGGGGAGAGGCGGTTTGCCTATTGGGCGCTCTTCCGCTT  
CCTCGCTCACTGACTCGCTGCGCTCGGTCGTTTCGGCTGCGGCGAGCGGTAT  
CAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAAC  
GCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTA  
AAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGC  
ATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACT  
ATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGT  
TCCGACCCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAG  
CGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGT  
CGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACC  
GCTGCGCCTTATCCGGTAACATCGTCTTGAGTCCAACCCGGTAAGACACG  
ACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGG  
TATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTA  
CACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTT  
CGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTA  
GCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGA  
TCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAAC  
GAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTT  
CACCTAGATCCTTTTAAATTAATAAATGAAGTTTTAAATCAATCTAAAGTAT  
ATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCAC  
CTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGTTGCCTGACTCCCCGT  
CGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTG  
CAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATA  
AACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATC  
CGCCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTC

[illegible]

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig. 36c (con't)

ATGCCGCCTCCTCCATGAAGCCCCCAGATCCCTGCCCTGCTCATGCTCCCC  
GCTGTCCTCCACACAGTGGCCCAGCCCAGTACCCTGTCCCACACAGC  
CTACCATGTGGTCCAGCAATTGCTATCTGTCACTGATTTATCTCTCCCGCA  
CCCTGTGACCTCCTCCTGGGCAGGGACCTTTCTGGTCCATCTCCTTATGA  
AGAAGCTGTACTGGCCTGGGCGCGTGGCTCACGCCTGTAATCCCAGCACT  
TTGGGAGGCCAAGGCAGGTGGATCACCTGAGGTCAGGAGTTCGAGACCA  
GCCTGGCCAAACATGGTGAAATCCCATCTCTACTAAAAAAATACAAAAAT  
TAGCCGGGCGTGGTGTCTGGGCGCCTGTAATCCCAGCTACTCGGGAGGCTG  
AGGCAGGAGAATCGCTTGAACCCAGGATGTAGAGGTTACAGTGAGCTGA  
GACTGTGCCACTGCACTCCAGCCTGGGCAACAGAGTGAAACTCTGTCTCA  
AAAAAAAAAAAAAAAAAAAAAAAAAAGAAGCAGCAGCAGCAGCAGCAGCA  
GCAGCTGCACACATGGGGAAATAAGAGCAATCAGACCCTTCTAATTGCCA  
TTTCCATAGGAAGTTAGGGAGATTACTGTTCCAGCAGTGGCTACATTCCGG  
AAAACAGCCGCAGAAGAAATGAGAGGCTTCTCAAGTCCTGCATTTTCTTT  
TTTTTTTTTTTTTGAAATATATAATCAGGCAATCTCCCAAGCCAGAATGGCT  
CAGAGAGACTCCCAAGTCCTACATTTTCAAGTTAAAATTCAGGCAGTGAA  
ACTCCAGAGCACACAACCTGGGCCATGGCTGTAAACCAGCTACGTTCTGAA  
TCTCAGATCCATGAAAACACAGAGGCAGCCTCACCCTCCGCAGGCTGTG  
AACAGGACGGACGGCTGGCTACTGGCCATCTCCCTGCCTGCCTGTTGATCC  
ACTTTCAACAGGCCTGAGTCTTTCTCTGACTCACCCATCAGGTGGACCCCC  
TGCAGCAGGAGTGTTCCTCGGCCACAGAAAGCCGATTCCCTCATCTCATCA  
CTCAATACCTATCTACTGAGTCCTCCTCCTCAGAGTCCAGCCCTGCGCTGG  
GGGCACAGAGAGGAGTCAGCTCCCCGCTGAGACAGAAACCAGGTACTGG  
CTGGGCGGAGGGACTGCAGGAGGGGGCAGGGTGCTGAAGAGGGGTCCAT  
GGCAGTTGGTGATGGATGAGCTGAGCCTGGGAAGGGAACAGAGGTGGGC  
TAGGGTCTGGAGACAGACAGGGAAGCCTAGAGCAGCTGAAGAACGGGAA  
GTCAGTGGGACAGGAAGACAGGAGGCCGGGTAGAACAGATGGCCGTC  
AGCCTTAACCTCCAAGGAATTGAAAGCCAACATGGTTGCATGGATGATGCT  
TTGGAAGCCTGGGGGGCCGGGTGCTAGTCTTCCCTTTCTGAAGATAACAC  
CCCGTCAAGGACCGTTACAGTGCGGACAGCCCTGGCAGCACTTAAAAGG  
CACCAGAAGCGAATGAGAAGCAGAATCGTTGATGCGTCTGAGCACGTGCA  
CAAAGCAGACACGGTTCTCAGGACTCGCATTCCTTCACCCACTTCATTCCC  
ACAACATCCCTAAGAGGGAAATACTTCACCGATGAGGAGACCGAGGCAC  
AGAGCAGTTATGGCACGTCCCCGAGGTACACAGTCAGAGATGGAACCCG  
GACTTGACCCCAAGGCAGGCTGGCTCCAGAGCATCTCCAGTGCTCCACCAC  
GATGCTGGAGGTCTGGGGCTCTTTCTCAGCAGTTCAACTCAGACCCAGACT  
CCACAGCAGGGCCTGGGGGCCAATCAGAATAGGCCCTCTCACCCAAGGGG  
CTAGGCATAAGACCTGAACCTGAAGCACCTCTCGCTCAAACAAGCAGCTC  
AGGAACCCCAAAATGCAGTGTGAATAAGACCCAGGTCATACCCATGCCTG  
GCTGTCCCAGGGATGTCTATGGTCTCCAAGAATAAGCTAAGAATAAGAAT  
AGGGGCTGCTCGTTAGGCAGCCCAGCAAGAGAGCACCTGTTAGCCGGAGC  
CTCCCATGAACCTTTCGGCAATGTTCTTTGTCAGCGGCGTTGCCTTTTCCTC  
TGACGGGTCCAGTCCAACCAAACCCAGCCAACAGGAAGCAGCCTGGATT  
GTGCTATCATTCAAGTCAGTCGACAAACGCTGAATCTATACTGCACACTCTG  
CACCTGATTCCCTACTGGAAACCAAGCTTCTTCCAGGGAACGGGGTGGGA  
CAGGAAGTGAAGGGTTCATGTGCCCTGGGCTGGGCCGGGGAACAGGGTCA  
GGACAGCCCTCCACTGCCAGGCCTGGAGTGTACCCTGCACCTAAGCCCGT  
GGTGATGCACCTGTCACCGCAAAACATTCTACAGTGATCAGGGGAACCTC  
TACCGTGATTTAGGCAAACGAGTGTTGGCTGTGTGATGGAGATGGTGATT  
CTGGTTTACACAAGACTCACAACTCATCAATCTGGACTAAAGGACAATC

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig. 36d (con't)

CTAAAAGAATCGATTCTGCCCACAGAGACGTGGTATGATCTGAGTCTTTCT  
CAACTCCAAAGCCAGAACAGATACTGCCTACCCTCTGGGGGAAGGATCCC  
TTCTCTCCCAATGCAAGTGAGACAACATGGGGTGTGGCTCTCTAGAACT  
AGTGGATCCCCCGGGACCGGTCCCCCACTCACCTGCCAGTAAGCAGTGG  
GTTCTCTAGTTAGCCAGAGAGCTCTGCTTATATAGACCTCCCACCGTACAC  
GCCTACCGCCCATTTGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAA  
AGTCCCGTTGATTTTGGTGCCAAAACAACTCCCATTGACGTCAATGGGGT  
GGAGACTTGGAATCCCCGTGAGTCAAACCGCTATCCACGCCCATTGATG  
TACTGCCAAAACCGCATCACCATGGTAATAGCGATGACTAATACGTAGAT  
GTACTGCCAAGTAGGAAAGTCCCATAAGGTCATGTACTGGGCATAATGCC  
AGGCGGGCCATTTACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATA  
TGATACACTTGATGTACTGCCAAGTGGGCAGTTTACCGTAAATAGTCCACC  
CATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACATACGT  
CATTATTGACGTCAATGGGCGGGGGTCTGTTGGGCGGTCAGCCAGGCGGGC  
CATTTACCGTAAGTTATGTAACGCGGAACTCCATATATGGGCTATGAACTA  
ATGACCCCGTAATTGATTACTATTAATAACTAGTCAATAATCAATGTCAAC  
GCCCCGGGCTGCAGGAATTCTACCGGGTAGGGGAGGCGCTTTTCCCAAGGC  
AGTCTGGAGCATGCGCTTTAGCAGCCCCGCTGGCACTTGGCGCATCACAA  
GTGGCCTCTGGCCTCGCACACATTCCACATCCACCGGTAGCGCCAACCGG  
CTCCCTTCTTTGGTGGCCCCCTTCGCGCCACCTTCTACTCCTCCCCTAGTCAG  
GAAGTTCCCCCCCCGCCCCGAGCTCGCGTCGTGCAGGACGTGACAAATGG  
AAGTAGCACGTCTCACTAGTCTCGTGCAGATGGACAAGCACCGCTGAGCA  
ATGGAAGCGGGTAGGCCTTTGGGGCAGCGGCCAATAGCAGCTTGGCTCCT  
TCGCTTTCTGGGCTCAGAGGCTGGGAAGGGGTGGGTCCGGGGGCGGGCTC  
AGGGGCGGGCTCAGGGGCGGGGCGGGCGCGAAGGTCCTCCGGACCCGGC  
ATTCTGCACGCTTCAAAAGCGCACGTCTGCCGCGCTGTTCTCCTCTTCCTC  
ATCTCCGGGCCTTCGACCTGCATGAAAAAGCCTGAACTCACCGCGACGTC  
TGTCGAGAAGTTTCTGATCGAAAAGTTCGACAGCGTCTCCGACCTGATGC  
AGCTCTCGGAGGGCGAAGAATCTCGTGCTTTTACGCTTCGATGTAGGAGGG  
CGTGGATATGTCCTGCGGGTAAATAGCTGCGCCGATGGTTTCTACAAAGA  
TCGTTATGTTTATCGGCACCTTTGCATCGGCCGCGCTCCCGATTCCGGAAGT  
GCTTGACATTGGGGAATTCAGCGAGAGCCTGACCTATTGCATCTCCCGCC  
GTGCACAGGGTGTACGTTGCAAGACCTGCCTGAAACCGAACTGCCCCGCT  
GTTCTGCAGCCGGTCGCGGAGGCCATGGATG

**pKI-CMV-SD-Vanilloid-YFP (SEQ ID NO:85)**

TTTTTACCCCCTCTCCCCTCCTTTTGC GGGGGGAAAAAAAAAAAAAAAAAAAA  
AAAAAAGGAGAAGAGAAAAAAGCGAGCGAGAGAGAAAGCGAGATTGA  
GGAAGAGGATGAAGAGTTTGGCGATGGGTGCTGGTTCCGTAGGCCCAGAT  
GGACAAGAATAGCCCCCGCCCTTGCGGACAGTATCCCATTCACTGACTCA  
GATCAGATCAAGCCGGCCGCTTGCCAAGGGCCCTGTGAAGCAGGGTACCC  
CAAACTCCAACCTTGCTGCTGCCCCAGCCCCCTAGAACTGAAGTGTTTCC  
AGGACTGAACCTCTCACCCAGAGGCCTCAGAGGTGAGCAGGCCTAGCAG  
GGCCCAGGCAGTCCTGCGGCCACTGACGTCGGCCTGGGAGGGTGGACAGG  
CCCCCGGCTCAGAGCCATCTGTGGTTCTGGGTTAGACCCATCCCTCCTCGT  
CTCTGGGCCTCAGGTGCCTCCTCTGCAGGGTGAGGTTGATAACCACCGCG  
CTGCCTCCCTCCCCACACAGAACAAGGAAAACGGCCGGGGTGGCTGTCTG  
GGGCTGAATTCAGGGAGGATCTCGGTGATGAGGATGGCTCAGTCCAGAAG  
AGCCAAGCAGACTGTGTCCCTGGAATAGGGTGAGCGGCAGAGACTGGCCC  
ACCCACACCCACACCGCACTGCGGGGCCCTGCTGTGCAACGGGTCCACAC  
ATCATCAGCCAGGTGCCCGGCCTGCCTTTGCTCTTCAACCTCGCTGCCACA  
GCCACTGAGCTTATACGAGATTTTGGATTTTGTGCTTTTGTGCTTTTATG  
AATCAACATCTGTCAAGCATCCTGGCCTTGAATGTTTAGGCGTGTGTGTGT  
GTGTGTGTGTGTGTGTGTCTCACTCTGTGCGCCAGACTAGAGTGCAATGGG  
GCAATCTCTGTTCACTGCAACCTCCACCTCCCAGGTTCAAGCGATTCTCCT  
CCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCGCCCGCCACCATGCGTG  
GCTAATGTTTGTATTTTGTAGTAGAGACAGGGAACGTTTAGGCTTTAAGTGA  
TTTGGAGCTGGTTGGTCTTCTAGGCCTAAACACCTAGAGATCAGCTGGCCC  
CTGGCAGCAGCATGTGTAGTTGGACACATGAGCTGATGCTATTTTCCACTC  
CCATCCTGCCCCATCCCCATGCTTCCCCTCCCTCTGGCTGGGCATCCCCAC  
TCCCTGGCACCCAGGGGTGGCCCATACATCCCTCCCATAGCCTCTATTCCC  
ATCGGGTCTCCACCTAAGGGCTTTTTCCTCTGTCTACCCTTGACACAAGTCC  
TATCACCCTCAGATGCTACTTCCCCTCAGGATCCAGCACTGATGCCGCCT  
CCTCCATGAAGCCCCCAGATCCCTGCCCTGCTCATGCTCCCCGCTGTCTC  
CACACAGTGGCCCAGCCCACTGACCGCCTGTCCACACAGCCTACCATGT  
GGTCCAGCAATTGCTATCTGTCACTGATTTATCTCTCCCGCACCCCTGTGAC  
CTCCTCCTGGGCAGGGACCTTTCCTGGTCCATCTCCTTATGAAGAAGCTGT  
ACTGGCCTGGGCGCGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGC  
CAAGGCAGGTGGATCACCTGAGGTCAGGAGTTTCGAGACCAGCCTGGCCAA  
CATGGTGAAATCCCATCTCTACTAAAAAAATACAAAAATTAGCCGGGCG  
TGGTGTGCGGCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGA  
ATCGCTTGAACCCAGGATGTAGAGGTTACAGTGAGCTGAGACTGTGCCAC  
TGCACTCCAGCCTGGGCAACAGAGTGAACTCTGTCTCAAAAAAAAAAAAA  
AAAAAAAAAAAAAAAAAGAAGCAGCAGCAGCAGCAGCAGCAGCTGCACAC  
ATGGGGAAATAAGAGCAATCAGACCCTTCTAATTGCCATTTCCATAGGAA  
GTTAGGGAGATTACTGTTCCAGCAGTGGCTACATTCCGGAAAAACAGCCGC  
AGAAGAAATGAGAGGCTTCTCAAGTCCTGCATTTTCTTTTTTTTTTTTTG  
AAATATATAATCAGGCAATCTCCAAGCCAGAATGGCTCAGAGAGACTCC  
CAAGTCCTACATTTTCAAGTTAAAATTCAGGCAGTGAACTCCAGAGCAC  
ACAACTGGGCCATGGCTGTAAACCAGCTACGTTCTGAATCTCAGATCCAT  
GAAAACACAGAGGCAGCCTCACCCTCCGCAGGCTGTGAACAGGACGGA  
CGGCTGGCTACTGGCCATCTCCCTGCCTGCCTGTTGATCCACTTTCAACAG  
GCCTGAGTCTTTCTCTGACTCACCCATCAGGTGGACCCCCTGCAGCAGGAG  
TGTTCCCGGCCACAGAAAGCCGATTCCCTCATCTCATCACTCAATACCTAT

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

Michael Allen Whitney

VPI/02-143 US2

Fig. 37b (con't)

CTACTGAGTCCTCCTCCTCAGAGTCCAGCCCTGCGCTGGGGGCACAGAGA  
GGAGTCAGCTCCCCGCTGAGACAGAAACCAGGTACTGGCTGGGCGGAGG  
GACTGCAGGAGGGGGCAGGGTGCTGAAGAGGGGTCCATGGCAGTTGGTG  
ATGGATGAGCTGAGCCTGGGAAGGGAACAGAGGTGGGCTAGGGTCTGGA  
GACAGACAGGGAAGCCTAGAGCAGCTGAAGAACGGGAAGTCAGTGGGAC  
AGGAAGACAGGAGGCCGGGTAGAACAGATGGCCGTCAGCCTTAACTCC  
AAGGAATTGAAAGCCAACATGGTTGCATGGATGATGCTTTGGAAGCCTGG  
GGGGCCGGGTGCTAGTCTTCCCTTTCTGAAGATAACACCCCGTCAAGGAC  
CGTTCACAGTGCGGACAGCCCTGGCAGCACTTAAAAGGCACCAGAAGCGA  
ATGAGAAGCAGAATCGTTGATGCGTCTGAGCACGTGCACAAAGCAGACAC  
GGTTCTCAGGACTCGCATTCTTCACCCACTTCATTCCCACAACATCCCTA  
AGAGGGAAATACTTCACCGATGAGGAGACCGAGGCACAGAGCAGTTATG  
GCACGTCCCCGAGGTCACACAGTCAGAGATGGAACCCGGACTTGACCCCA  
GGCAGGCTGGCTCCAGAGCATCTCCAGTGCTCCACCACGATGCTGGAGGT  
CTGGGGCTCTTTCTCAGCAGTTCAACTCAGACCCAGACTCCACAGCAGGG  
CCTGGGGGGCCAATCAGAATAGGCCCTCTCACCCAAGGGGCTAGGCATAAG  
ACCTGAACCTGAAGCACCTCTCGCTCAAACAAGCAGCTCAGGAACCCCAA  
AATGCAGTGTGAATAAGACCCAGGTCATACCCATGCCTGGCTGTCCCAGG  
GATGTCTATGGTCTCCAAGAATAAGCTAAGAATAAGAATAGGGGCTGCTC  
GTTAGGCAGCCCAGCAAGAGAGCACCTGTTAGCCGGAGCCTCCCATGAAC  
CTTTCGGCAATGTTCTTTGTGACGCGCGTTGCCTTTTCTCTGACGGGTCCC  
AGTCCAACCAAACCCAGCCAACAGGAAGCAGCCTGGATTGTGCTATCATT  
CAGTCAGTCGACAAACGCTGAATCTATACTGCACACTCTGCACCTGATTCC  
CTACTGGAAACCAAGCTTCTTCCAGGGAACGGGGTGGGACAGGAAGTGGG  
GGGTGATGTGCCCTGGGCTGGGCCGGGGAACAGGGTCAGGACAGCCCTCC  
ACTGCCAGGCCTGGAGTGTAACCTGCACCTAAGCCCGTGGTGATGCACCT  
GTCACCGCAAAACATTCTACAGTGATCAGGGGAACTTCTACCGTGATTTA  
GGCAAACGAGTGTTGGCTGTGTGATGGAGATGGTGATTCTGGTTTACACA  
AGACTCACAACTCATCAATCTGGACTAAAGGACAATCCTAAAAGAATCG  
ATTCTGCCCACAGAGACGTGGTATGATCTGAGTCTTTCTCAACTCCAAAGC  
CAGAACAGATACTGCCTACCCTCTGGGGGAAGGATCCCTTCTCTCCCAAT  
GCAAGTGAGACAACATGGGGTGTGGCTCTCTAGAACTAGTGGATCCCCCG  
GGACCGGTCCCCCACTCACCTGCCAGTAAGCAGTGGGTTCTCTAGTTAGC  
CAGAGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGCCCAT  
TGCGTCAATGGGGCGGAGTTGTTACGACATTTTGGAAAGTCCCGTTGATTT  
TGGTGCCAAAACAACTCCCATTGACGTCAATGGGGTGGAGACTTGGAAA  
TCCCGTGAGTCAAACCGCTATCCACGCCCATTGATGTACTGCCAAAACC  
GCATCACCATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAAGTA  
GGAAAGTCCCATAAGGTCATGTACTGGGCATAATGCCAGGCGGGCCATTT  
ACCGTCATTGACGTCAATAGGGGGCGTACTTGGCATATGATACACTTGAT  
GTACTGCCAAGTGGGCAGTTTACCGTAAATAGTCCACCCATTGACGTCAA  
TGGAAGTCCCTATTGGCGTTACTATGGGAACATACGTCATTATTGACGTC  
AATGGGCGGGGGTTCGTTGGGCGGTCAGCCAGGCGGGCCATTTACCGTAAG  
TTATGTAACGCGGAACCTCCATATATGGGCTATGAACTAATGACCCCGTAA  
TTGATTACTATTAATACTAGTCAATAATCAATGTCAACGCCCCGGGCTGCA  
GGAATTCTACCGGGTAGGGGAGGCGCTTTTCCCAAGGCAGTCTGGAGCAT  
GCGCTTTAGCAGCCCCGCTGGCACTTGGCGCATCACAAAGTGGCCTCTGGC  
CTCGCACACATTCCACATCCACCGGTAGCGCCAACCGGCTCCCTTCTTTGG  
TGGCCCCCTTCGCGCCACCTTCTACTCCTCCCCTAGTCAGGAAGTTCCCCCC  
CGCCCCGCAGCTCGCGTCGTGCAGGACGTGACAAATGGAAGTAGCACGTC

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 37c (con't)

TCACTAGTCTCGTGCAGATGGACAAGCACCGCTGAGCAATGGAAGCGGGT  
AGGCCTTTGGGGCAGCGGCCAATAGCAGCTTGGCTCCTTCGCTTTCTGGGC  
TCAGAGGCTGGGAAGGGGTGGGTCCGGGGGCGGGCTCAGGGGCGGGCTC  
AGGGGCGGGGCGGGCGCGAAGGTCCTCCGGACCCGGCATTCTGCACGCTT  
CAAAAGCGCACGTCTGCCGCGCTGTTCTCCTCTTCCTCATCTCCGGGCCTT  
CGACCTGCATGAAAAAGCCTGAACCTACCGCGACGTCTGTGCGAGAAGTTT  
CTGATCGAAAAGTTTCGACAGCGTCTCCGACCTGATGCAGCTCTCGGAGGG  
CGAAGAATCTCGTGCTTTTCAGCTTCGATGTAGGAGGGCGTGGATATGTCCT  
GCGGGTAAATAGCTGCGCCGATGGTTTCTACAAAGATCGTTATGTTTATCG  
GCACTTTGCATCGGCCGCGCTCCCGATTCCGGAAGTGCTTGACATTGGGG  
AATTCAGCGAGAGCCTGACCTATTGCATCTCCCGCCGTGCACAGGGTGTG  
ACGTTGCAAGACCTGCCTGAAACCGAACTGCCCCGCTGTTCTGCAGCCGGT  
CGCGGAGGCCATGGATGCGATCGCTGCGGCCGATCTTAGCCAGACGAGCG  
GGTTCGGCCCATTCGGACCGCAAGGAATCGGTCAATACACTACATGGCGT  
GATTTTCATATGCGCGATTGCTGATCCCCATGTGTATCACTGGCAAACCTGTG  
ATGGACGACACCGTCAGTGCCTCCGTCGCGCAGGCTCTCGATGAGCTGAT  
GCTTTGGGGCCGAGGACTGCCCCGAAGTCCGGCACCTCGTGCACGCGGATT  
TCGGCTCCAACAATGTCCTGACGGACAATGGCCGCATAACAGCGGTTCATT  
GACTGGAGCGAGGCGATGTTTCGGGGATTCCCAATACGAGGTGCGCAACAT  
CTTCTTCTGGAGGCCCGTGGTTGGCTTGTATGGAGCAGCAGACGCGCTACTT  
CGAGCGGAGGCATCCGGAGCTTGCAGGATCGCCGCGGCTCCGGGCGTATA  
TGCTCCGCATTGGTCTTGACCAACTCTATCAGAGCTTGGTTGACGGCAATT  
TCGATGATGCAGCTTGGGCGCAGGGTCGATGCGACGCAATCGTCCGATCC  
GGAGCCGGGACTGTCGGGCGTACACAAATCGCCCGCAGAAGCGCGGCCG  
TCTGGACCGATGGCTGTGTAGAAAGTACTCGCCGATAGTGGAACCGACGC  
CCCAGCACTCGTCCGAGGGGCAAAGGAATGAGCTCGCTGATCAGCCTCGAC  
TGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCCTCCCCCGTGCTTCC  
CATTGTCTGAGTAGGTGTCATTCTATTCTGGGGGGTGGGGTGGGGCAGGA  
CAGCAAGGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCG  
GTGGGCTCTATGGCTTCTGAGGCGGAAAGAACCAGCTGGGGGATATCAAG  
CTTATCGATACCGTCGACCTCGAGGGGGGGCCCGGTACCCAGCTTTTGTTC  
CCTTTAGTGAGGGTTAATTGCGCGCTTGGCGTAATCATGGTCATAGCTGTT  
TCCTGTGTGAAATTGTTATCCGCTCACAATTCCACACAACATACGAGCCGG  
AAGCATAAAGTGTAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACAT  
TAATTGCGTTGCGCTCACTGCCCGCTTTCAGTCGGGAAACCTGTCGTGCC  
AGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATT  
GGGCGCTCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTCTCGTTCGG  
CTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCAC  
AGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAA  
AAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCT  
CCGCCCCCTGACGAGCATCAAAAAATCGACGCTCAAGTCAGAGGTGGC  
GAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCC  
CTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCC  
TTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTAT  
CTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCC  
CCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACCTATCGTCTTGAGTCC  
AACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAG  
GATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGT  
GGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTG  
CTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAA

## METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 37d (con't)

ACAAACCACCGCTGGTAGCGGTGGTTTTTTTGTGTTGCAAGCAGCAGATTAC  
GCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGT  
CTGACGCTCAGTGGAACGAAACTCACGTTAAGGGATTTTGGTCATGAGA  
TTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAATAAATGAAGTTTT  
AAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATG  
CTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCAT  
AGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTAC  
CATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCT  
CCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAA  
GTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGG  
AAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTTCGCAACGTTGTTGCC  
ATTGCTACAGGCATCGTGGTGTACGCTCGTCGTTTGGTATGGCTTCATTC  
AGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGC  
AAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTCAGAAGTAAGTT  
GGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTAC  
TGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAA  
GTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTC  
AATACGGGATAAATACCGCGCCACATAGCAGAAGTTTAAAAGTGCTCATCA  
TTGGAACCGTTCTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTG  
AGATCCAGTTCGATGTAACCCACTCGTGCACCCAAGTATCTTCAGCATCT  
TTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGC  
CGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT  
TCCTTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGAGCG  
GATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGC  
ACATTTCCCCGAAAAGTGCCACCTAAATTGTAAGCGTTAATATTTTGTTAA  
AATTTCGCGTTAAATTTTTGTAAATCAGCTCATTTTTTAACCAATAGGCCG  
AAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTG  
AGTGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTC  
CAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTG  
AACCATCACCTAATCAAGTTTTTTTGGGGTTCGAGGTGCCGTAAAGCACTA  
AATCGGAACCCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGAAAGCC  
GGCGAACGTGGCGAGAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGC  
TAGGGCGCTGGCAAGTGTAGCGGTACGCTGCGCGTAACCACCACACCCG  
CCGCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTCGCCATTACAGGCTGC  
GCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCAG  
CTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAAACGCCAG  
GGTTTTCCAGTCACGACGTTGTAAAACGACGGCCAGTGAGCGCGCGTAA  
TACGACTCACTATAGGGCGAATTGGAGCTCCACCGCGGTGGCGGCCGCAA  
CAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAAGTAAATG  
CAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTT  
GTAACCATTATAAGCTGCAATAAACAAGTTGGGGTGGGCGAAGAACTCCA  
GCATGAGATCCCCGCGCTGGAGGATCATCCAGCCGGCGTCCCGGAAAACG  
ATTCCGAAGCCCAACCTTTCATAGAAGGCGGCGGTGGAATCGAAATCTCG  
TGATGGCAGGTTGGGCGTCGCTTGGTCGGTCATTTTGAAGCTTTACTTGTA  
CAGCTCGTCCATGCCGAGAGTGATCCCGGCGGCGGTACGAACTCCAGCA  
GGACCATGTGATCGCGCTTCTCGTTGGGGTCTTTGCTCAGGGCGGACTGGT  
AGCTCAGGTAGTGGTTGTGCGGGCAGCAGCACGGGGCCGTCGCCGATGGGG  
GTGTTCTGCTGGTAGTGGTTCGGGCGAGCTGCACGCTGCCGTCCTCGATGTTG  
TGGCGGATCTTGAAGTTCACCTTGATGCCGTTCTTCTGCTTGTCGGCCATG  
ATATAGACGTTGTGGCTGTTGTAGTTGTACTCCAGCTTGTGCCCCAGGATG

METHODS AND COMPOSITIONS FOR RAPID DEVELOPMENT OF SCREENING ASSAYS

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Fig. 37e (con't)

TTGCCGTCCTCCTTGAAGTCGATGCCCTTCAGCTCGATGCGGTTTACCAGG  
GTGTCGCCCTCGAACTTCACCTCGGCGCGGGTCTTGTAAGTTGCCGTCGTCC  
TTGAAGAAGATGGTGCCTCCTGGACGTAGCCTTCGGGCATGGCGGACTT  
GAAGAAGTCGTGCTGCTTCATGTGGTCGGGGTAGCGGGCGAAGCACTGCA  
GGCCGTAGCCGAAGGTGGTCACGAGGGTGGGCCAGGGCACGGGCAGCTT  
GCCGGTGGTGCAGATGAACTTCAGGGTCAGCTTGCCGTAGGTGGCATCGC  
CCTCGCCCTCGCCGGACACGCTGAACTTGTGGCCGTTTACGTCGCCGTCCA  
GCTCGACCAGGATGGGCACCAACCCCGGTGAACAGCTCCTCGCCCTTGCTC  
ACCATGGTGGCGACCGGTGGATCCTTCTAGAGTCGACGATCGAAGTTAGC  
TTGATTTGACAGTGGCTGGGGGTGCGCCGCCGGGTTTTATAGGAAGCCA  
CAGCGGCCACTCGAGCCATAAAAGGCAACTTTAGGAACGGCGGGGGGTG  
ATTGGATTCGAGTCGTTTATTCACCGGCCTTGCCGCACAGTGCAGCATT